

INSPECTION AND CONTROL OF NUCLEAR
ARMAMENTS IN A NATION-STATE
SYSTEM: UNITED STATES-RUSSIAN
DISARMAMENT NEGOTIATIONS,
1945-1962

By
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INTRODUCTION

The basic question with which this study is concerned is how, if at all, security can be achieved through disarmament in the political and military-technological environment of the Cold War. More precisely, attention is focused on the problem of inspection and control which, under existing political and military-technological conditions, appears to be the key to security through negotiated arms reductions and limitations.

No matter how thoroughly nations¹ are in agreement on arms control measures, unless there is assurance that all parties will comply with them, they cannot be safely implemented. Traditionally, nations have relied on mutual trust and good faith and on their own intelligence resources for assurance that the terms of an arms treaty were being fulfilled. But the disarmament negotiations since World War II have occurred within a milieu in which these traditional sources of assurance, for one reason or another, do not really apply. Consequently, there has been a search for some other alternative method. In general, both sides have thought in terms of an institutionalized inspection and control system. But on the specific form that it should take, their approaches have been fundamentally opposed. Primarily for that reason,

¹ This study follows the customary practice of treating nation-states as actors in international relations. Actually, of course, states are abstractions, and the source of their policies can be traced to individual decision-makers within their governments.

the negotiations have failed to make any substantial progress although both the Soviet Union and the Western powers have at times evidenced a serious interest in reaching an agreement on disarmament. Thus whether arms control ultimately proves to be a feasible practice in the military relations of states will depend for the most part on the resolution of the issue of inspection and control. This is the central premise on which the present study is based.

From this point of view, inspection is the crux of the larger problem of disarmament and therefore cannot be examined apart from it. Consequently, in Chapters I and II we shall consider the totality of disarmament as a theoretical concept, relating inspection and control to it. Shifting from a theoretical to an historical frame of reference, we shall then in Chapters III, IV, and V analyze the disarmament negotiations since 1945 in order to view the problem of inspection and control within that context. The first five chapters, which constitute Part I of the study, are focused on the problem of disarmament as a whole, with inspection as the major aspect. Part II, utilizing the theoretical and historical perspective achieved in Part I, concentrates on the difficulties which have blocked agreement on an inspection system. Chapter VI deals with the mechanical and operational complications implicit in inspection and control, and Chapter VII examines the American-Soviet frictions which have multiplied these complications.

CHAPTER I

THE PROBLEM OF DISARMAMENT

The disarmament negotiations are one of the few threads that run all the way through the fabric of international relations in the twentieth century. Even so, statesmen and scholars today are no more united in evaluating their relevance to international security than they were in 1899 when the first multilateral disarmament conference convened at the Hague. One point of view, based largely on past experience with the regulation of armaments, holds that "any attempt at disarmament must . . . necessarily fail."¹ Still another, influenced mainly by the implications of the military-technological revolution, assumes that disarmament in some form can make an invaluable contribution to international stability and order. Obviously, whether the substantive content of the negotiations on arms control is really to be taken seriously depends very much on which of these premises serves as a point of departure.

So an analysis of the problem of disarmament logically begins with a consideration of this question: In what way, if at all, is it possible for international agreements controlling the amounts, kinds, and deployment of weapons to enhance the mutual security of nations? After considering the validity of disarmament as a theoretical concept, we shall then turn to a discussion of the role it has played in the military and political relations of states. With the larger picture of the problem

¹Salvador de Madariaga, The Blowing Up of the Parthenon (New York: Frederick A. Praeger, 1960), p. 72.

before us, we can then proceed with greater understanding to unravel the tangled maze of difficulties encountered by negotiations on concrete arrangements that would translate the idea into a program of practical action.

The Tradition of Politically Unbounded Military Competition

Since it first became an issue in international relations at the beginning of this century, the disarmament movement has been shaped within two matrixes. One is political and the other is technological. The political factor includes, first, the fundamental system of the organization of power in international relations and, second, within that system, the interests or objectives which power is used to achieve. The technological factor is used here to denote the nature of the armaments and the characteristics of the scientific instruments and procedures proposed for controlling them under a possible disarmament agreement.¹

On the one hand, the kind of political response which nations have made to the problem of disarmament has shown remarkable historical continuity in different periods under varying patterns of military rivalry. But, in contrast, military technology changed gradually up to World War II when it spurted forward at a progressively faster rate of development.

¹ It is not proposed here that political and technological influences can be isolated and treated separately except in the abstract. To cite one example, the problem of the detection of underground nuclear weapon testing is a technical problem inasmuch as it is concerned with limitations of scientific instruments and procedures for identifying nuclear explosions below a certain threshold. It is also political insofar as it involves a distrust of Soviet actions and the refusal of the Soviet Union to permit enough ground inspections to compensate for the deficiencies of seismological detection techniques.

Before analyzing the impact of the technological revolution on the problem of disarmament, let us see how it has affected the existing pattern of the military relations of nations.

One of the important trends in recent times has been a gradual growth in institutionalized cooperation between states in more and more areas of their relationships. In their military relations, however, countries have always been wary of accepting any limitation upon their freedom of action to determine the nature of their defense establishments and strategies. To be sure, nations sometimes enter into military alliances and thereby voluntarily accept controls on their military policies, such as obligations to maintain certain minimum force levels.¹ But where the relations of states are essentially antagonistic and the military capability of one is perceived as an aggressive threat to the other, armaments policies are nearly always strictly unilateral. Seldom is there any reciprocation, either tacit or explicit, regarding limitations on military preparations. Military power in this situation is a reflection of the absence rather than the presence of a basis for cooperative action. Consequently, the multilateral approach to the determination of armaments policies between opposing countries, which is the theme of disarmament, has been largely, although not altogether, unsuccessful.

Rather, at any given time the overall military configuration has been the product of the free interplay of different national policies and not the result of direct planning at the international level. In

¹ Hedley Bull, The Control of the Arms Race (London: Institute for Strategic Studies, 1961), p. 77.

the latter case, whenever nations agree--formally or informally, tacitly or explicitly--to certain restraints on the forces-in-being they will maintain, the military environment is managed and military competition is bounded. In the former case, which coincides more with historical experience, the complexion of the military environment is determined mainly by unilateral actions of governments, and military competition is unbounded. That is, military programs are not influenced substantially by negotiated or unnegotiated reciprocal restrictions.

In general the unstructured, uncontrolled military environment tends to obey certain "natural laws" of its own which make it orderly and predictable to a degree. Normally, it can be assumed that within the limits of its power potential, a nation's military capability will be maintained at a level reflecting the extent to which the security of its vital interests is believed to be endangered, and no higher. Alternately, when the threat that originally prompted a military build-up has subsided, a natural lowering of force levels generally takes place. Thus it should be kept in mind that :

The lowering of the level of armaments, the disbandment of forces, the abandonment of particular categories of armament, the withdrawal of armies from advanced positions, the diversion of resources away from armaments and towards other purposes, are practices as familiar in military history as their opposites.¹

As an example, the United States in 1945 reduced its military personnel from twelve million down to about three million. Also, in May, 1956, in making the transition from a predominantly conventional strategy to a greater reliance on nuclear weapons, the Soviet Union announced a

¹Ibid., p. x.

unilateral troop cut of 1.3 million men. Basically, then, in a laissez-faire pattern of military relations, the ebb and flow of armaments levels is a reflection of the confidence or lack of confidence by states in each other's intentions.

Granted that military increases are primarily a response to the stimulus of political conflict, nevertheless, in themselves they may also affect the political environment in a manner not anticipated when the expansion was initiated. In the first place, the armed strength required by a country to protect and promote its important interests is relative to the armaments of others.¹ Secondly, in striving for military adequacy, governments err on the side of caution by seeking a margin of safety in armaments.² Consequently, whenever a serious conflict of interest develops between nations, one of the by-products typically is an arms race, marked by a struggle for relative military superiority, first, through a quantitative buildup of existing weapons types or, second, through the qualitative development of new or improved weaponry. As the opposing powers respond to one another's stepped-up mobilization, frequently a huge escalation in general force levels takes place.

The need for disarmament is predicated upon the supposition that, once triggered off, the dynamics of unbounded military competition in a laissez-faire military environment lead inexorably toward a war that may not really be wanted by either side in the first place. The arms-tension

¹Quincy Wright, A Study of War (Chicago: University of Chicago Press, 1942), II, 801.

²Madariaga, The Blowing Up of the Parthenon, p. 74.

spiral, it is maintained, becomes self-generating and divorced from the political disputes as its source. Thereby, the dimensions of the military rivalry grow far out of proportion to the political goals originally at stake.¹

Care must be taken not to exaggerate out of its right proportions the exacerbating influence of an arms race on the tension level. Before World War II, indeed, politically unbounded military competition was tolerable because restricted technological capabilities circumscribed national military programs. Even if munitions industries were operating at full capacity, the rate at which weapons were manufactured was much slower compared with later automated techniques of mass production. Then, too, with the exception of chemical and biological agents there were no weapons of mass destruction. Considering the limited destructiveness of the weapons that were available, the military balance could not be drastically altered except by a huge arms program stretching over a period of time. Finally, the low level of technological development of the tools of war severely restricted the kinds of military preparations that could be undertaken, quite apart from what general staffs may have wanted to do.

Therefore, the overall military environment was less susceptible

¹Alastair Buchan, for example, notes that ". . . the Soviet-American contest in missiles, in submarines, and in the means of defence against them has reached a pitch of intensity which now makes the contest self-generating and independent of the level of political tension between the two countries and their allies." "Their Bomb and Ours: Some Concluding Remarks on the Paradox of Force," Nuclear Weapons, Missiles, and Future War, ed. Charles A. McClelland (San Francisco: Chandler Publishing Company, 1960), p. 131.

to being severely destabilized by an all-out arms race. Ordinarily, large concentrations of forces-in-being were not held in readiness over prolonged periods of time during which conflict just short of war persisted. On the contrary, in general wars involving the big powers the decisive factor most often was the war potential of countries which could be mobilized after the initial blow had been struck.¹

Furthermore, in the era of conventional weapons lightning surprise attacks were less probable. It was next to impossible to carry out secretly a large-scale program of naval construction. Likewise, putting together massive conscripted armies required a lengthy mobilization process which gave adversary countries adequate warning to build up their armed forces before it was too late. Usually, this lead time also provided an opportunity for the disputants to communicate their intentions to one another and to make a final effort to avert a showdown.²

To sum up, prior to the arrival of the atomic age, in peacetime military rivalry a decisive advantage was sought principally by stepping up production of arms already in use instead of concentrating on the development of more efficient military equipment. The disarmament movement,

¹ Henry A. Kissinger, The Necessity for Choice: Prospects of American Foreign Policy (New York: Harper and Brothers, 1960), p. 210.

² An example where this failed was the outbreak of World War I, which many military strategists regard as an "accidental war." Thomas C. Schelling and Morton H. Halperin write that: "The final weeks, and especially days, before the declaration of war in 1914 showed that with the decision procedures and communications of that era, governments were incapable of seeing their way and talking their way out of a war that was neither intended nor desired by any major participant." Strategy and Arms Control (New York: Twentieth Century Fund, 1961), p. 27. See also Bruce M. Russett, "Cause, Surprise, and No Escape," Journal of Politics, XXIV (February, 1962), 3-22.

as a result, was preoccupied largely with reducing or limiting the amounts of armaments. The assumption was that if arms increased indefinitely, war would result.¹ Regardless of the merits of this assumption, it is significant that in the past the incentive to negotiate disarmament agreements has not been strong enough to bring about disarmament other than in a few isolated instances. In retrospect, the need for arms control measures during the era of conventional weapons was not so compelling because the upper limits of the technological capacities of nations already served reasonably well as boundaries to channelize and temper their hostile military relations. But the military technological revolution gradually widened these boundaries through erosion until World War II when they were all but swept away.²

The Diminishing Technological Boundaries of Military Force

In earlier times the limited capacity of weapons in terms of destructive force and deliverability, as a matter of course, imposed certain restraints on the kinds of wars states could prepare to fight even as political-psychological checks on the use of force declined with the development of integral nationalism. But within a single generation we have seen many of these technological limitations lifted through a series of scientific breakthroughs of monumental proportions.

¹This hypothesis is explored through the use of mathematical equations in Lewis F. Richardson, Arms and Insecurity: A Mathematical Study of the Causes and Origins of War, eds. Nicholas Rashevsky and Ernesto Trucco (Pittsburgh: Boxwood Press, 1960). See also Samuel P. Huntington, "Arms Race: Prerequisites and Results," Public Policy, eds. Carl J. Friedrich and Seymour Harris (Cambridge: Harvard University Press, 1958), VIII, 41-86.

²Kissinger, The Necessity for Choice, p. 210.

The first revolution occurred in the destructive power of weapons. The twenty kiloton-yield atomic weapons dropped on Hiroshima and Nagasaki on August 6 and August 9, 1945, killed 106,000 people and injured 100,000 others.¹ At the end of 1960, 4,500 of these casualties were still hospitalized and approximately 230,000 other living persons were suffering ill-effects, ranging from burns to cancer, that have been attributed to the atomic blasts.²

These first atomic bombs were 1,000 times more powerful than the TNT blockbusters used in strategic bombing during World War II.³ With the development of thermonuclear weapons in 1952, the destructive force of atomic explosives was multiplied by another factor of 1,000.⁴ Moreover, there is technically no upper limit on the size of hydrogen bombs that can be manufactured. In the fall of 1961, for example, the Soviet Union is known to have tested a weapon with an energy yield equivalent to 58 million tons of TNT, which, had it utilized a uranium instead of a lead casing, would have been in excess of 100 megatons.⁵

Estimates of the damages that an all-out nuclear attack on the

¹U. S., Atomic Energy Commission, The Effects of Nuclear Weapons (Washington: U. S. Government Printing Office, 1957), p. 455. The explosive force released by a nuclear detonation is expressed as being equivalent to a given number of tons of the chemical high explosive, TNT.

²Facts on File, 1961, p. 62.

³Harrison Brown and James Real, Community of Fear (Santa Barbara, Calif.: Center for the Study of Democratic Institutions, 1960), p. 7.

⁴Ibid.

⁵Charles J. V. Murphy, "Now the President Will Decide on His Own," Life, LII (February 16, 1962), 76.

United States would cause are highly conjectural. Herman Kahn has calculated that a 20,000 megaton strike on 150 major American cities in the 1960's would kill between 3 and 160 million out of a total population of 180 million, depending on the degree of civil defense preparations and the amount of warning-time.¹ In hearings before the Congressional Joint Atomic Energy Committee in 1959, it was estimated that a hypothetical 1,446 megaton attack would leave 50 million dead and 20 million seriously injured.² Thus in the 1960's a surprise attack probably would kill or critically injure at least one-third of the population of this country.³

The second revolution has centered around the systems for delivering weapons to their targets. With the development of ballistic and guided missiles, against which there is no known defense, the two major nuclear powers are now technically capable of striking and virtually annihilating each other at will.

The disappearing technological boundaries on military power has left a vacuum which can be filled only by such political limitations on the use of force as states may establish tacitly or explicitly.⁴ Stated

¹Herman Kahn, On Thermonuclear War (Princeton: Princeton University Press, 1961), p. 113.

²U. S., Congress, Joint Committee on Atomic Energy, Hearings, Biological and Environmental Effects of Nuclear War, 86th Cong., 1st Sess., 1959, pp. 644-645.

³The effects of nuclear weapons are also analyzed in John M. Fowler (ed.), Fallout (New York: Basic Books, 1960); and Linus Pauling, No More War (New York: Dodd, Mead and Company, 1958).

⁴Although the present study is limited to a consideration of military competition in peacetime, this generalization applies to all gradations of the use of force, from pressure to armed conflict. For a study of reciprocal restraints in war, see Henry A. Kissinger's hypothetical

another way, if in the future there is to be bounded military rivalry between nations, it will have to be deliberately contrived through the creation of a political consensus. Political will rather than technological capacity must be relied upon as the limiting factor in military programs.

Here, then, is a tentative foundation for arms control agreements that materialized only with the coming of the era of weapons of mass destruction. In the period of quantitative arms races disarmament emphasized quantitative restrictions, as we have seen. By the same token, in the present arms race where a "complete technological revolution in the art of war" occurs every five years, a general reorientation of the disarmament movement has taken place in this country.¹ Overall, the principal concern in official disarmament policy has shifted from a preoccupation with lowering or limiting the size of conventional and nuclear weapons stockpiles to either slowing down or offsetting the effects of the technological improvement of weapons.² This reflects a perceptible change in thinking as to how arms are related to political tension and the outbreak of war. Now it is widely held that the worst hazards are those which are inherent in the nature of modern weapons systems (the decrease in strategic warning time to practically zero with the coming of

model for a limited nuclear war in Nuclear Weapons and Foreign Policy (New York: Harper and Brothers, 1957), pp. 227-230. Among other things, the warring countries would exchange inspectors to verify adherence to the rules under which the war is being fought.

¹Kahn, p. 316.

²Robert E. Osgood, "Stabilizing the Military Environment," American Political Science Review, LV (March, 1961), 24.

the military missile, necessitating constant readiness for all-out war, and so on) and the rate of technological innovation (the haunting fear of both sides of a decisive breakthrough by the other).

Efforts to achieve political restraints on the arming process can be directed through three different channels: (1) unilateral action by the United States or the Soviet Union to make its military posture less menacing (which in the language of deterrence means an emphasis on more expensive, less efficient "second strike" weapons, such as the Polaris system, that are relatively invulnerable to surprise attack); (2) tacit understandings where both sides reciprocally limit their military policies (e.g., the voluntary moratorium on nuclear weapon tests from November, 1958, to September, 1961, and Soviet-American refusal to assist their allies in developing or acquiring nuclear weapons); and (3) formal negotiated agreements, with which the present study is concerned.¹

A wide range of possible approaches to regulating the militarization of the power potential of nations by formal agreements has been considered in negotiations between governments. To illustrate, the generic field of disarmament (and since 1958, arms control) was described by the 1961 statute creating the United States Arms Control and Disarmament Agency as encompassing

. . . the identification, verification, inspection, limitation, control, reduction, or elimination, of armed forces and armaments of all kinds under international agreement including the necessary steps taken under such an agreement

¹ Ernest W. Lefever (ed.), Arms and Arms Control (New York: Frederick A. Praeger, 1962), p. xiii.

to establish an effective system of international control, or to create and strengthen international organizations for the maintenance of peace.¹

Because it is such a broad concept, disarmament cannot be identified exclusively with any one particular course of action or ultimate political objective. Accordingly, generalizations about disarmament are ambiguous and misleading unless the kinds of arms limitations being considered are made clear. For analytical purposes, the diverse approaches to dealing with the technological crisis of military force through arms control, however, may be classified under two general theoretical models of international relations. The first is the world-government model which encompasses disarmament plans drastically limiting the force levels of national military establishments, if not abolishing them altogether. The distinctive characteristic of proposals that fit into this category is that they necessitate an alteration of the present structure of international relations in the direction of either limited or general world government.² The second is the nation-state model which assumes the

¹U. S., Arms Control and Disarmament Agency, Documents on Disarmament, 1961, Arms Control and Disarmament Agency Publication No. 5 (Washington: U. S. Government Printing Office, 1962), p. 483. (Hereafter cited as Documents on Disarmament, 1961).

²The most prominent advocates of disarmament schemes which presuppose a world-government framework are Grenville Clark and Louis Sohn, World Peace through World Law (Cambridge: Harvard University Press, 1958); Norman Cousins, In Place of Folly (New York: Harper and Brothers, 1961); Erich Fromm, May Man Prevail? (Garden City, N. Y.: Doubleday and Company, 1961); Seymour Melman, The Peace Race (New York: George Braziller, 1962); Philip Noel-Baker, The Arms Race: A Programme for World Disarmament (New York: Oceana Publications, 1958); Bertrand Russell, Has Man a Future? (New York: Simon and Schuster, 1962); James Warburg, Disarmament: The Challenge of the Nineteen Sixties (Garden City, N. Y.: Doubleday and Company, 1961).

continuation of the present international political system substantially unchanged and attempts to adapt the idea of disarmament to the organization of power along the lines of autonomous territorial units.¹

Since these models are based on fundamentally different premises, the solutions to the problem of disarmament which they envisage are very dissimilar and sometimes even contradictory, as we shall now see.

The World-Government Model of Disarmament

To a greater extent than during the League period, the disarmament negotiations since World War II have been dominated by the ideal of a disarmed world. Roughly from 1946 to 1954 the deliberations in United Nations organs centered around the concept of total disarmament projected into a single field isolated from all others--the field of atomic energy.²

1

The trend in this country since 1958 has been to associate the term "arms control" with the nation-state model (i.e., schemes for regulating but not drastically curtailing national military capabilities) while identifying "disarmament" with the world government model (i.e., dismantling or severely limiting military establishments). Yet another trend among those trying to develop a precise system of classification of disarmament plans is to use "arms control" as the generic term and "disarmament" as one particular approach (i.e., the reduction or abolition of armaments). But the Soviets will not accept "arms control" because it implies, they say, approval of the idea of inspection without disarmament. In U. S. official practice "disarmament" and "arms control" are used synonymously; this is also the practice that will be followed in the present study. For a discussion of the problems created by the lack of precision in disarmament terminology, see Bernhard G. Bechhoefer, Postwar Negotiations for Arms Control (Washington: The Brookings Institution, 1961), pp. 7-8.

2

For an analysis of the 1946 American proposal for an Atomic Development Authority with a monopoly over "all atomic energy activities potentially dangerous to world security, see *infra*, Chapt. III. Of this plan, Inis L. Claude, Jr. has noted that it "has been rightly described as a proposal of limited world government, in the sense that it envisaged

After 1954, however, the United States showed less enthusiasm for the drastic approach while the Soviet Union made more and more use of it. Since the Soviet plan for general and complete disarmament was presented to the United Nations in September, 1959, the general negotiations have been conducted within the context of a number of phases or stages which, if adopted, would lead over a period of years to total disarmament.¹

(Both Western and Russian plans for comprehensive disarmament, however, provide for the retention of internal security forces.) No doubt partially because of the wide popular appeal of the grandiose Soviet scheme, the United States in 1961 responded with a detailed comprehensive disarmament proposal of its own.²

Yet the apparent concern of the great powers for total disarmament is deceiving. What this approach has amounted to in practice has been the concentration of the negotiations on the partial measures to be carried out during the first stage only.³

an international agency with functions and powers cutting deeply into the traditional preserve of national sovereignty." Swords into Plowshares: The Problems and Progress of International Organization [2d ed. rev.; New York: Random House, 1959], p. 312.

¹U. S., Department of State, Documents on Disarmament, 1945-1959, Department of State Publication No. 7003 (Washington: U. S. Government Printing Office, 1960), II, 1460-1474. (Hereafter cited as Documents on Disarmament, 1945-1959.)

²U. S., Department of State, Freedom from War: The United States Program for General and Complete Disarmament in a Peaceful World, Department of State Publication No. 7277 (Washington: U. S. Government Printing Office, 1961).

³James E. Dougherty, "The Disarmament Debate: A Review of Current Literature," Orbis, V (Winter, 1962), 492-493.

This is just as well because the obstacles to the negotiation of such an arrangement are formidable. The contraction of national military forces down to a level incapable of providing security from external challenges cannot be willed into existence by nations through direct consultations on the question. Rather, it can come about only indirectly as international anarchy is replaced by world law embodied in an institutional structure capable of providing the security that is now dependent upon national military power. In short, nothing less than a basic change in deeply-ingrained patterns of international political behavior can bring about the abolition or the severe limitation of national war-making capabilities.¹

Thus when applied to a system of sovereign nation-states, the concept of disarmament in its doctrinally pure form becomes internally inconsistent; it is a paradox. It is inconceivable that states, while retaining the authority to act as the final judge in matters involving their interests, would willingly surrender the means by which they exercise this authority.²

Salvador de Madariaga, writing in 1929, pinpointed the dichotomy facing those who seriously propose to solve the problem of military force by abolishing it:

¹"Military force is inherent in national power and national power is inherent in the existence of independent states," asserts Samuel P. Huntington. Huntington, p. 31.

²Raymond Aron, On War, trans. Terence Kilmartin (Garden City, N. Y.: Doubleday and Company, 1959), p. 18.

It is evident, therefore, that no disarmament is possible as long as no alternative instrument of policy to armaments is devised, and no reduction of armaments is possible as long as the utility of armaments as instruments of policy has not been reduced.¹

As Madariaga sees it, before there can be disarmament the political framework of international relations must first be changed over to world government.

Now that military competition is no longer technologically confined, it may be plausibly argued that it is necessary for international political institutions to be adapted to technological changes. Hans J. Morgenthau, the leading exponent of the realist view of international politics, has gone so far as to suggest that "the nation-state is too small and weak a mold to contain atomic power."

For the existential threat atomic power poses to all nations of the world cannot be answered at all from within a state system whose basic unit is the nation state.

The most elementary function of the nation state is the defense of the life of its citizens and of their civilization. A political organization that is no longer able to defend these values and even puts them in jeopardy must yield, either through peaceful transformation or violent destruction, to one capable of that defense. Thus, under the impact of the invention of gunpowder and of the first industrial revolution, the feudal order had to yield to the dynastic and the nation state. Under the technological conditions of the pre-atomic age, the stronger nation states could, as it were, erect walls behind which their citizens could live in security. . . .

The feasibility of an all-out atomic war has completely destroyed this protective function of the nation state.²

¹Salvador de Madariaga, Disarmament (New York: Coward-McCann, 1929), p. 60.

²Hans J. Morgenthau, The Purpose of American Politics (New York: Alfred A. Knopf, 1960), p. 175.

Reasoning exclusively from the implications of technological realities, the idea of "national security" appears to be anachronistic. In the atomic age, according to Norman Cousins, "no national security is possible. Either there is a workable world security system or there is nothing."¹

Those who are unwilling to postpone the negotiation of "general and complete disarmament" until the conditions are ripe for world government maintain that these conditions cannot develop unless there is substantial progress toward disarmament. They also stress the advantages of moving ahead with drastic first-stage reductions of all classes of weapons over taking the partial measures approach. Since all states would have totally divested themselves of their armed power upon the implementation of the final stage of the disarmament treaty, two stubborn problems would be minimized: the determination, first, of the ratio of forces to be retained by countries and, second, of the equivalency of different kinds of weapons (e.g., the number of tanks it takes to equal a battleship in military value).²

In addition, the argument is made that the task of inspection and control would be more manageable in a demilitarized world for at least three reasons: (1) Violations of a prohibition of all military activities would be more easily detected than evasions of prescribed limits on armed forces. (2) Since a variety of inspection methods would be needed

¹Cousins, pp. 97-98.

²Warburg, pp. 155-156.

in carrying out a comprehensive disarmament arrangement, any subversion of the agreement would more likely be uncovered than if only one kind of verification procedure were being used. (3) If states no longer acted under the assumption that they may become involved in a war with one another, the need for extreme military secrecy would be less urgent, thus creating conditions more favorable to the acceptance of the idea of inspection.¹

Mechanically, the comprehensive approach to disarmament has considerable merit. But to seriously expect diplomatic negotiations to produce an international agreement maximizing disarmament in all three of its dimensions--the number of countries participating, the categories of weapons affected, and the degree to which they are reduced--necessitates another assumption. The negotiations would also have to create the political conditions required to sustain the agreement. As has already been indicated, this would mean the political reconstruction of the international community as we now know it. A supranational political setting is the prerequisite of all radical disarmament plans whether or not this is acknowledged explicitly, as in the case of the American blueprint for general and complete disarmament of September, 1961, or ignored, as in the case of the Soviet proposal of 1959 for achieving complete disarmament in four years.

Supposing for the moment that states were willing to accept major reductions in their armaments without altering the international power structure, the possibility of armed conflict would still remain. For as

¹Bull, pp. 137-144.

long as the sovereign prerogative to resort to war inheres in national states, "we can prohibit every weapon, even penknives, and people will beat out each other's brains with clubs. . . ." ¹ Furthermore, although it is conceivable that nuclear weapons might be outlawed completely, as was contemplated by the Baruch Plan of 1946, the technological know-how for constructing them cannot be eliminated. Consequently, if nuclear weapons were abolished, when the need to have them again became sufficiently compelling, the arms race would be renewed, probably with greater intensity than ever.

It emerges clearly, then, that in order to do away with war, disarmament must be coupled with an alteration of the organization of power at the international level. This, of course, is a task which lies outside the realm of what diplomatic negotiations can accomplish. Indeed, it is sometimes suggested that the international disarmament debate further exacerbates the tensions between rival powers instead of improving the climate of their political relations.

There is little evidence to suggest that this situation will change in the foreseeable future. Atomic-age technology, contrary to widespread expectations, has not initiated any revolutionary transformation in the substance of international politics. Pre-atomic and atomic age political thoughtways exhibit the same fundamental characteristics. Alternative courses of action continue to be viewed within the frame of reference of their probable effect on national interests rather than in

¹Emery Reves, "Why Waste Time Discussing Disarmament?" Look, XXV (March 28, 1961), 69.

terms of solving the problems of the universe. Nor does it now appear that the international system is evolving inexorably toward the pooling of sovereignty at a supranational level. On the contrary, the fragmentation of the world into autonomous territorial units has speeded up since the last world war, as is reflected in the growth in United Nations membership from 52 countries in 1945 to 110 in 1963.

The conclusion follows that during the decades immediately ahead the solution of the power problem engendered by the sovereign state system by doing away with the system itself is not a practicable one. Whatever its merits normatively, it does not appear to lie within the range of available alternatives. Most likely, any practical results in the disarmament negotiations will come in the area of more limited, modest measures made possible by favorable political and technological circumstances within the existing political framework. We next turn our attention to this approach to the control and reduction of armaments.

The Nation-State Model of Disarmament

A realistic consideration of the problem of disarmament proceeds from the fundamental premise that any arrangement for controlling armaments must be initiated and maintained by governments of sovereign states.¹ From that premise can be deduced both the limitations and the

¹ The most important sources to consult on the nation-state framework of disarmament are Donald G. Brennan (ed.), Arms Control, Disarmament, and National Security (New York: George Braziller, 1961); Bull; David H. Frisch (ed.), Arms Reduction: Program and Issues (New York: Twentieth Century Fund, 1961); Arthur T. Hadley, The Nation's Safety and Arms Control (New York: Viking Press, 1961); Louis Henkin (ed.), Arms Control: Issues for the Public (Englewood Cliffs, N. J.: Prentice-Hall, 1961); Lefever, Arms Control; Melman (ed.), Inspection for Disarmament (New York: Columbia University Press, 1958); Schelling and Halperin.

promise of arms control as a means of bolstering the mutual security of nations. In the final analysis, the policies of states are not geared to the realization of such universals as peace and disarmament but to the course of action which is thought will best serve their national interests.¹

By the same token, the purpose of disarmament is not to disarm (which is the presumption of the idealist conception of disarmament discussed above) but to advance the interests which nations deem vital to their security. In all fields of policy, the overriding concern of states is at least to preserve their relative security position vis-à-vis each other and at best to strengthen it. Thus disarmament, both at the level of negotiation and the level of practice, has consistently been treated as a means of achieving national gains. But the gains that are sought may be either unilateral or mutual in nature.

Because by definition the problem of disarmament is a matter of concern only when an adversary relationship exists between states, it is not surprising that the proposals of one side are regarded with monumental fear and suspicion by the other, often for good reasons. For if a country had a choice, it would doubtlessly prefer to eliminate rather than mitigate what it perceives to be a threat to its legitimate interests. To that extent, there is validity to the deeply entrenched assumption in American policy-making circles that "our Communist enemies . . .

¹The best analysis of the national interest theory of international relations can be found in Hans J. Morgenthau, In Defense of the National Interest (New York: Alfred A. Knopf, 1952) and in the article by the same author: "Another 'Great Debate': The National Interest of the United States," American Political Science Review, XLVI (December, 1952), 961-988.

are dedicated to the single goal of world domination."¹ But like the United States, the Soviet Union cannot deal with the world strictly on its own terms. It must act within the range of alternatives that are available to it.

Often, too, even though a sharp divergence of interests divides them, countries may still share important areas of common interests. In the sphere of disarmament, if these overlapping interests are sufficiently important, a quid pro quo agreement mutually beneficial to the positions of all parties may be negotiated. As such, nothing in the essence of the political process of a national state system precludes states from entering into an agreement regulating their military competition. Just as national policy is not oriented ultimately toward achieving disarmament, neither is it guided inevitably by the opposite course of action. This point is explored further in the next chapter which examines the different ways in which states have used disarmament to further their national interests.

¹ Edward Teller, "Plan for Survival," Saturday Evening Post, CCXXXV (February 17, 1962), 34.

CHAPTER II

THE ROLE OF DISARMAMENT IN INTERNATIONAL RELATIONS

Although disarmament by and large has remained an untried theoretical approach to international peace and security, nations traditionally have attached high priority to it in their foreign policy. Since 1945 this question has received far more attention at the diplomatic conference table than the territorial problems which, after all, are the heart of Cold War political tensions. That disarmament is an important instrument of national policy we can be certain. But in view of the repeated failure of the postwar negotiations to yield any significant tangible results, it is much more difficult to discern precisely what the governments of the big powers are trying to accomplish.

One school of thought holds that unilateral gains are the main goal of disarmament diplomacy. Negotiating tactics, so it is argued, are calculated to achieve a propaganda advantage and to bring about a shift in the military balance of power unfavorable to the opposing side. The other school maintains that ordinarily when governments engage in negotiations they are seriously interested in reaching a mutual agreement if, of course, the benefits outweigh the costs.

It is tempting to identify one or the other of these usages of disarmament as the exclusive theme of policy to which other goals are subordinated. But this artificially simplifies the reality of the negotiations. A much safer assumption is that the actions of governments regarding disarmament are influenced significantly by both of these considerations much of the time. Hedley Bull notes perceptively that

. . . it would be quite mistaken to regard arms control negotiations as an elaborate charade enacted by governments of the world for the benefit of the peoples of the world. Though they want other things more, most governments in most negotiations want an agreement, if it can be had on their own terms. Usually, each government is divided as to how seriously an agreement should be sought: as the United States government has been regularly and publicly divided over the feasibility of a ban on nuclear tests.¹

Before moving on to examine the operation of disarmament under a formal international agreement, which is the focus of the present study, let us briefly consider the ways in which the issue is utilized by states to their unilateral advantage.

The Use of Disarmament To Gain a Propaganda Advantage

With the development of mass political consciousness and active popular participation in national and international affairs, world public opinion has become an increasingly important element of a nation's power.² Here the ideology of disarmament, because of its powerful moral and emotional appeal, lends itself well to use as an instrument of psychological warfare through which states try to cultivate a favorable image of themselves in the eyes of the world. While appearing to support the elimination of the instrumentalities of war, an attempt is made to discredit the enemy by placing the onus of the failure of disarmament on him.

One interpretation suggests that Russian and American disarmament plans since 1945 have been formulated so as to be unacceptable to the

¹Bull, p. 66.

²Louis J. Halle, "Is War Obsolete?" New Republic, CXLVI (April 2, 1962), 15.

other side. Moreover, in this view, the objectionable provisions (sometimes called "jokers") written into the plans are not necessarily a logical extension of the sponsoring state's national interests since they are inserted for the specific purpose of forestalling an agreement. Rather than striving to reach an accommodation between their conflicting positions (as is the case with bona fide negotiations), plans are offered in the full knowledge that they will have to be rejected, the aim being to make the rejector appear in a bad light before world public opinion.

Doubts have been raised, for instance, as to whether the United States would accept a treaty incorporating the rigorous inspection and control apparatus it now advocates, even in the absence of Soviet opposition. Premier Khrushchev, in an address before the UN General Assembly in September, 1959, asserted that:

The opponents of disarmament can easily make any measure conditioned upon demands for control which are of such a nature that, in the circumstances of a universal arms race, other States cannot meet them. It is plain that even those States which, for one reason or another, press such far-reaching demands for control would themselves have no inclination to accept those demands in practice if it came to the point of implementing them.¹

The United States reacted along the same lines to the Soviet proposal for complete disarmament mentioned earlier.

Joseph Nogee describes this as the "'gamesmanship' of the disarmament negotiations":

¹Documents on Disarmament, 1945-1959, II, 1456.

A cardinal feature of this "game" has been to reject the proposals of the other side without appearing to sabotage the discussions.

Every plan offered by either side has contained a set of proposals calculated to have wide popular appeal. Every such set has included at least one feature that the other side could not possibly accept, thus forcing a rejection. The proposing side has been able to claim that the rejector is opposed to the idea of disarmament in toto. The objectionable feature may be thought of as the "joker" in every series of proposals.

This tactic accounts for the paradox that, over the past fourteen years, the two sides have appeared to be narrowing their differences on some issues even though fundamental differences have prevented them from consummating an agreement. The proposals were never meant to be considered in isolation. If the negotiators could afford to come closer at times, it was only because a joker that had outlived its usefulness had been discarded; meanwhile, a new one was being introduced that would again make over-all agreement impossible.¹

The validity of this interpretation, which implies that the two major nuclear powers do not really want or expect to reach an agreement on disarmament, depends upon the relationship between their national interests at any particular time and is therefore subject to change as their interests change.

As an analytical concept, the propaganda theme offers a plausible explanation of Soviet disarmament policy during the early years of the atomic age. From 1945 to 1949 the United States and Russia faced one another in the disparate roles of atomic and non-atomic powers. Even after the Soviet explosion of an atomic device late in 1949 broke the American atomic monopoly, we continued to hold an overwhelming superiority in the means of delivery. In the early 1950's the Russians developed

¹Joseph Nogee, "The Diplomacy of Disarmament," International Conciliation, DXXVI (January, 1960), 232.

a substantial delivery capability, but it was not until the early 1960's that the two countries approached a position of nuclear parity in terms of weapons and delivery systems.¹

As long as the military power relationships between the United States and the Soviet Union were so utterly asymmetrical, there was little coincidence between their interests, militarily speaking. As a result, no foundation for serious negotiations existed for almost a decade after 1945. During that period, when the negotiations revolved around the international control of atomic energy, Russian policy was not directed at reaching an accommodation with the position of the Western powers on the problem. Rather, through the exploitation of the disarmament motif, the Kremlin was able to further its own objectives, foremost of which apparently was to mobilize world public opinion in favor of its position and to inhibit the credibility of the American atomic threat.² In short, Russian policy sought to counterbalance the effects of American nuclear superiority while the Soviet nuclear development program went ahead at full throttle:

By its world-wide campaign about the horrors of atomic warfare, the Kremlin had undermined the willingness to resist in many areas of the non-Soviet world and made very difficult the employment of the chief weapon in the Western arsenal.³

¹The stages in the changing strategic relationships between the United States and the Soviet Union are discussed in Kissinger, The Necessity for Choice, p. 13.

²See the well-documented study: Joseph L. Nogee, Soviet Policy Toward International Control of Atomic Energy (Notre Dame, Ind.: University of Notre Dame Press, 1961), esp. pp. 259-285.

³Kissinger, Nuclear Weapons and Foreign Policy, p. 373.

With the changing configuration of their military interests, however, the involvement of American and Soviet interests in the negotiation of arms control measures has also shifted. Although we have no completely reliable indicator for distinguishing between "negotiation" and "propaganda," it appears that the area of overlapping interests of Russia and the Western powers in arms control has widened as their nuclear capability has become more symmetrical. One test of the significant, albeit minimal, convergence of their disarmament interests is found in the occasional practice in recent years of narrowing the negotiations down by isolating specific, limited problems for precise, detailed consideration, such as the problems of nuclear-weapon testing, surprise attack, accidental war, and the spread of nuclear weapons to "nth countries."¹ Therefore, although propaganda is an important dimension of disarmament, the policies of governments in this field cannot be explained entirely by this interpretation.

The Use of Disarmament to Gain a Power Advantage

In the absence of a political détente, rival governments approach disarmament negotiations with the same mutual distrust and fear that they are trying to alleviate through arms limitations. When negotiating on disarmament, the universal tendency is to impute to the potential enemy

¹This line of reasoning assumes that proposals of a grandiose scope, which are ipso facto unnegotiable, indicate a reluctance to engage in serious deliberations and an emphasis on propaganda. On the other hand, when the scope of the issue under consideration is narrow, it is more likely that areas of agreement can be found and less likely that propaganda factors are the predominant influence.

the same motivations that are believed to be responsible for the arms race itself.

Drawing on his first-hand experience as director of the Disarmament Section of the League of Nations, Salvador de Madariaga avers that disarmament conferences are more in the nature of armament conferences because

. . . no nation is really interested in keeping intact any pattern of power whatsoever; everyone of them wants it altered in such a way that will increase her own share of power. It follows that every 'disarmament' talk will in the nature of things develop so as to increase the real or relative armaments of the nations concerned even though it may appear to reduce their nominal or absolute armaments. For in actual fact the true if unavowed aim of every nation that goes into a disarmament conference is to increase her real or relative armament to the detriment of her rivals. Thus 'Disarmament' turns out to be but one of the forms the armaments race can take.¹

An examination of disarmament proposals going all the way back to the Hague Conference of 1899 confirms that states habitually have proposed limitations and reductions of armaments complementary to their own military interests. One of the influences prompting Czar Alexander II to call the first Hague Conference was the need to prevent the modernization of the German army with rapid-firing artillery, a step which Russia found difficult to match because of economic limitations.² Similarly, during the League period

¹ Madariaga, The Blowing Up of the Parthenon, pp. 74-75.

² Merze Tate, The Disarmament Illusion: The Movement for a Limitation of Armaments to 1907 (New York: The Macmillan Company, 1942), pp. 178-179.

Britain and the United States, as great naval powers, wished to abolish the submarine but retain battleships and aircraft carriers; the lesser naval powers wished to retain the submarine. France, a great land power, wished to retain tanks and heavy guns; the lesser land powers favored restriction of them.¹

The affinity between arms control proposals and military interests is also recognizable in the negotiations since 1945. In 1946 the United States, then holding an atomic monopoly, insisted on the establishment of a control system prior to the abolition of atomic weapons. On the other hand, the Soviet Union, with nothing to lose, demanded that the American atomic stockpile be destroyed first. Operating at a distinct disadvantage vis-à-vis the Soviet Union in the field of military intelligence, the United States has emphasized the importance of inspection. For its part, the Soviet Union regards the string of American military bases around its territory as an aggressive threat and accordingly in its proposals has given priority to their removal. France, having developed nuclear weapons but without the advanced means of delivering them, stresses the need for abolishing military missiles.²

Doubtlessly, if they had the opportunity, states would prefer to bring about the unilateral disarmament of the opposing side in relative, if not in absolute, terms. The extremely cautionary attitude of the participants in disarmament conferences becomes more understandable when it is realized how serious the issues at stake really are. Yet it would be incorrect to single out the disarmament negotiations as the only area

¹ Bull, p. 67.

² Ibid., p. 68.

where states promote their self-interests to the limit. In disarmament, as in other questions for which a negotiated settlement is sought, ultimately the most important consideration is not what the parties want but what they are willing to accept. A government may wish to strengthen its relative power position, but for reasons that we shall discuss in the next section it also may be satisfied to stabilize the existing balance. This is the necessary precondition for the successful negotiation of any disarmament agreement since no arrangement resulting in unequal advantages or disadvantages can legitimately be accepted.

Thus the following analysis by Harry T. Willetts of the basis of Russian disarmament policy provides one more piece of the puzzle that goes to make up the full picture of what disarmament is about:

Whatever the West imagines itself to be talking about, the Soviet Union will in fact be talking about the abolition of Western alliances, the isolation of the United States, the reorganization of international organization to ensure Soviet preponderance--and not, for a long time, about disarmament at all.¹

While a large part of the attention given to disarmament by nations is directed at influencing world public opinion and at trying to unilaterally disarm the opposing side of its most potent weapon, not all objectives are conflicting ones. Under certain conditions states may also find it useful to cooperate multilaterally in limiting the scope of their military competition. It is to this use that we now direct our attention.

¹Harry T. Willetts, "Disarmament and Soviet Foreign Policy," Arms Control: Issues for the Public, ed. Louis Henkin (Englewood Cliffs, N.J.: Prentice-Hall, 1961), p. 173.

The Use of Disarmament to Stabilize the Military Environment

Historically, most of the activity relating to disarmament has been confined to the negotiation stage in which, as was noted above, states attempt unilaterally to better their position at the expense of the interests of other countries. In several instances, however, arms control agreements have been successfully negotiated. A glance backward at past experience with the regulation of military capabilities is the logical point to begin a consideration of the function of disarmament in a nation-state system .

The Historical Background of Disarmament

By far the most successful examples of arms control, however, have been those instances in which neighboring countries have managed to conclude bilateral arms control agreements dealing with limitations on the militarization of their frontiers. Of these, the most famous was the Rush-Bagot Agreement of 1817 under which the United States and Great Britain limited their naval armaments on the Great Lakes.¹ But more important as far as international security is concerned, out of the long trail of multilateral disarmament conferences in this century have come only three formal agreements, all of them materializing during the inter-war years and pertaining solely to naval armaments.

In the Washington Treaty of 1922, the only instance where multilateral disarmament has ever become operative to any significant extent,

¹

A complete listing of bilateral agreements containing disarmament provisions can be found in Denys P. Myers, World Disarmament: Its Problems and Prospects (Boston: World Peace Foundation, 1932), pp. 52-56.

the United States, Great Britain, Japan, France, and Italy agreed to: (1) a ratio of 5: 5: 3: 1.67: 1.67, respectively, in their relative capital ship strength (with the United States, Britain, and Japan scrapping about 40 per cent of their battleships); (2) limitations on the size and number of aircraft carriers; and (3) a moratorium on the construction of capital ships until 1931, except in certain specified instances. Significantly, these limitations were coupled with other agreements stabilizing the political status quo in the Western Pacific.¹

The other two naval treaties were not nearly so influential. The London Treaty of 1930, ratified by the United States, Great Britain, and Japan, in addition to extending the moratorium on naval construction to 1936, fixed their maximum allowable tonnage strengths in the categories of vessels not covered by the Washington Treaty. The three countries were to have parity in submarines, but Japan was permitted only about two-thirds of the cruiser and destroyer tonnage of America or England.² Finally, the London Naval Treaty of 1936 between the United States, Great Britain, and France attempted to limit the maximum size of different kinds of naval vessels and provided a system for the exchange of information between governments on naval construction. Nothing was said about

¹The most incisive study of the Washington Conference on the Limitation of Armament is Raymond L. Buell, The Washington Conference (New York: D. Appleton and Company, 1922). The text of the Washington Treaty is printed on pages 372-393.

²The text of the London Treaty on the Limitation and Reduction of Naval Armament (April 22, 1930) is printed in U. S., Senate, Disarmament Subcommittee of Committee on Foreign Relations, Disarmament and Security: A Collection of Documents, 1919-1955, 84th Cong., 2d Sess., 1956, pp. 30-43. (Cited hereafter as Disarmament and Security.)

the ratio of the armaments of one power to the other.¹

The modest achievements of disarmament during the League years when the tension level was relatively low much of the time have not been duplicated, much less improved upon, during the Cold War. Solely in areas peripheral to their military interests have the United States and the Soviet Union been able to find a basis for cooperative action. Two such cases are worth mentioning here. One was the agreement by all of the atomic powers on the establishment in July, 1957, of the International Atomic Energy Agency to further the application of atomic energy for peaceful purposes, especially in underdeveloped countries. Interestingly, the Russians shared American concern for the need to have strict controls to prevent the diversion of fissionable materials to military uses by the countries receiving assistance from the IAEA.² The second case was the Antarctic Treaty which was signed on December 1, 1959, by the United States, the Soviet Union, and ten other nations. This treaty, the only postwar agreement involving arms control measures on American and Russian territories, provided for complete freedom of inspection and for the non-militarization of the Antarctic.³

From the limited actual experience with disarmament in the past, it is clear that what states seek to accomplish through agreements on

¹In 1937 Russia and Germany were brought under the provisions of the treaty through bilateral agreements with Britain. For the text of the London Treaty on the Limitation of Naval Armament, see ibid., pp. 43-57.

²Bechhoefer, Postwar Negotiations for Arms Control, p. 565.

³The treaty text is printed in Documents on Disarmament, 1945-1959, II, 1550-1556.

armaments is not to disarm as such but "to mitigate the effects of whatever armaments do exist."¹ Throughout the past, whenever a formal agreement has been successfully negotiated or whenever the negotiations have arrived at substantial areas of agreement, this has almost invariably been true. No matter how horrendous they are, strictly speaking, weapons per se do not constitute a threat to security; it is the likelihood that they will be used that is feared. Moreover, it should be noted that the perception by a nation of a threat to its security is bi-dimensional. There is apprehension over, first, what a potential enemy is capable of accomplishing in a military operation and, second, what his intentions are. A disarmament agreement, while it pertains directly to a readjustment of national military capabilities, is to be judged as a success or failure in terms of whether it assures the participants of the intention by one not to attack the other, and not by the magnitude of the actual reduction in armaments.

Beyond the generalization that the emphasis in disarmaments is on alleviating the destabilizing influences of weapons systems in the hands of states hostile to one another, it is difficult to draw any parallels between past experience with arms control and the present crisis of power which nations are facing. Heretofore, arms control has played a very small role in the military relations of states. Aside from the inherently

¹Frederick H. Hartmann, The Relations of Nations (2d ed. rev.; New York: The Macmillan Company, 1962), p. 276. See also Samuel P. Huntington's statement to the effect that "disarmament agreements seldom actually disarm states. What they do is to exclude certain specified areas from competition and thereby direct that competition into other channels." Huntington, p. 81.

complicated nature of the problems encountered in regulating armaments, neither political nor military-technological conditions have favored the acceptance of arms control as an established practice. Indeed, since armaments in themselves did not appear to exacerbate political tensions grossly, the influence arms limitation could have was also necessarily minimal. Furthermore, in conventional arms races additional increments of military power usually meant increased security. States therefore had a large measure of unilateral control over the maintenance of their own security, limited only by the power they could muster through the mobilization of their human and material resources and through strategic alliances. In brief, the accepted formula for security during the era of conventional weapons was to push ahead maximally in pursuit of a preponderance of military strength.

Disarmament in the Nuclear Age

Shifting the focus from the past to the present and future, let us recall the two fundamental characteristics of contemporary international relations that were explored in Chapter I. First, national governments today view the world politically in much the same terms as they have for centuries. Second, at the same time the equation through which they seek security has been drastically altered by technological change. Stated simply, we have entered the dawn of an age in which, paradoxically, power is becoming increasingly more abundant but less and less usable.

As early as November, 1953, Winston Churchill recognized that the accumulating stocks of offensive power of the United States and the Soviet Union might well have a salutary effect:

Indeed, I have sometimes the odd thought that the annihilating character of these agencies may bring an utterly unforeseeable security to mankind. . . . It may be that . . . when the advance of destructive weapons enables everyone to kill everybody else no one will want to kill anyone at all. At any rate it seems pretty safe to say that a war which begins by both sides suffering what they dread most--and that is undoubtedly the case now--is less likely to occur than one which dangles the lurid prizes of former days before ambitious eyes.¹

It is now generally accepted that armaments in the atomic age, with their immensely greater destructive potential, have restrained the actions of the great powers to a degree previously unknown. Quite possibly, in a preatomic military-technological setting, the severe political instability in Europe and Asia since 1945 would have provoked a major war before now.² As it is, a major war is not a very likely contingency despite such crisis points as Berlin, Germany, and China which periodically approach the boiling point without ever quite reaching it.

The effect of the paralysis of force as an instrument of policy for directing political change has been to perpetuate these basic East-West differences from year to year without any kind of a settlement. The corollary of the nuclear stalemate has been a political stalemate. Yet the recurrent crises over the future of Berlin and German reunification vividly demonstrate that the status quo being perpetuated is an unviable one. Even in the face of the almost certain catastrophic outcome of a nuclear war, it seems doubtful that the present uneasy equilibrium in

¹ From a speech in the House of Commons on November 3, 1953; quoted from John Slessor, Strategy for the West (New York: William Morrow and Company, 1954), p. 1.

² Halle, p. 13.

Central Europe can be prolonged indefinitely.

Whether international agreements on disarmament can contribute toward making the existing military and political environments more manageable remains to be seen. The timeless difficulties inevitably encountered in negotiating disarmament, such as how to provide security along with arms limitation, may well continue to prevent arms control from becoming a reality to any significant extent. On the other hand, a substantially stronger raison d'être underlies the disarmament negotiations now than during the era of conventional weapons. How disarmament is related to the problem of stabilizing the nuclear age military and political environments will be examined further in the pages that follow.

The Military-Technological Environment

The strategic model of deterrence, which serves as the frame of reference for military thinking both in the United States and Russia, assumes that rational action prevails in military decision-making. It follows that if one side believes that the other, after being attacked in a surprise "first-strike," would still possess a sufficient nuclear capability to strike back and inflict unacceptable damage on the aggressor, the incentive, although not the capability, for a deliberate surprise attack will have been removed.¹ A war initiated under these circumstances

¹For a fuller description of the theory of deterrence, the following may be consulted: Bernard Brodie, Strategy in the Missile Age (Princeton: Princeton University Press, 1959); Kahn; Kissinger, The Necessity for Choice; Basil H. Liddell-Hart, Deterrent or Defense: A Fresh Look at the West's Military Position (New York: Frederick A. Praeger, 1960); Thomas C. Schelling, The Strategy of Conflict (Cambridge: Harvard University Press, 1960).

for anticipated positive gains would not make sense. The criterion, then, for military preparations is not so much to maximize available destructive power as it is to build a strategic force that can withstand a surprise attack and then retaliate. This is known as the doctrine of the "invulnerable deterrent."

If these two premises--that governments act rationally in making decisions pertaining to war and peace and that strategic nuclear war is, indeed, irrational as long as deterrent forces on both sides are invulnerable--were entirely sound, we could be optimistic about the prospects for the "pax atomica." But even though modern weapon systems have produced a sort of uneasy stability in the military environment, they have also generated destabilizing pressures which increase the probability of an eventual thermonuclear war in spite of the obvious concern of the United States and the Soviet Union to avoid it.¹

The possibility haunts each power that the other may make some decisive technological breakthrough giving it a temporary position of military preponderance which would enable it to "win" a war through a surprise attack. At that point, a deliberate attack might be considered feasible, especially if the nation holding the advantageous position were convinced that war is inevitable sooner or later anyhow. This is referred to as "preventive war." Similarly, a nation may attack and initiate a "pre-emptive war" if it believes strongly that a nuclear first-strike against it is imminent, based on its interpretations of the enemy's actions. Or

¹See, for example, Albert Wohlsletter, "The Delicate Balance of Terror," Foreign Affairs, XXXVII (January, 1959), 211-234.

war may be triggered by some accidental cause (human or mechanical error, false alarm, or unauthorized behavior). It may also result from miscalculation by one country of how far another is willing to commit itself militarily before backing down from its position. Or it may be started by the action of some third power that wants to involve the two major powers in war in order to advance its own interests (thus the term "catalytic war"). Finally, a conventional war or a limited nuclear war may escalate into an all-out thermonuclear duel.¹

True, the likelihood of nuclear war can probably be reduced further by making it even less practicable through adding more explosive punch to deterrent forces, but the possibility of such a war, although lessened, would still remain. Furthermore, the price of decreasing the probability of a nuclear showdown in this way would be a much higher level of destruction in case a war actually took place.²

Consequently, where formerly a state or a power bloc met the danger of war by unilaterally maximising its military capability, now security has tended to become more of a collaborative effort between adversaries. Because neither side can any longer directly restrain a military strike by its adversary, each is dependent for its security on the actions of the other to an unprecedented extent. In effect, "as long as

¹This classification of the different ways war can start is taken from Kahn, pp. 226-229.

²The reader's attention is directed to Herman Kahn's caricature of the ultimate in deterrence. He hypothesizes that a "Doomsday Machine" securely hidden underground could be rigged so that after a certain number of nuclear bombs exploded over the United States, it would be triggered, destroying the earth. Kahn, pp. 144-148.

each side has the manifest power to destroy a nation and its population in response to an attack by the other, the 'balance of terror' amounts to a tacit understanding backed by a total exchange of all conceivable hostages."¹

So quite independently of the arena of political conflict, there has evolved an important field of latent common interests between the United States and the Soviet Union, based on what Reinhold Niebuhr has called the "minimal community [that] has been established through the sense of an involvement in a common predicament and peril."² What are these common interests? Certainly, at a minimum it is in the objective national interest of the Soviets and the Americans to mitigate the hazards mentioned above that could very well trigger an unwanted all-out nuclear war. In addition, the tacit agreement operating between the United States and the Soviet Union not to transfer nuclear weapons to allies that have not developed them indicates a common interest in preventing the spread of these weapons among non-nuclear nations. Not only would the instabilities of deterrence be compounded in a world with many nuclear powers instead of only four, but more importantly, the diffusion of nuclear weapons also promises to blur the distinction between the greater and the lesser powers.³

¹Schelling, The Strategy of Conflict, p. 239.

²Foreword by Reinhold Niebuhr in Brown and Real, p. 5.

³Bernard Baruch reports telling Andrei Vyshinsky in a private conversation that "there was an old saying on our western frontier that the Smith and Wesson revolver made all men equal. Once the smaller nations have atomic weapons they will be able to threaten even the strongest power." Bernard Baruch, Baruch: My Story (New York: Henry Holt and Company, 1957), p. 325.

In order not to overestimate or underestimate the significance of this apparent community of interests as a basis for positive action on the control and limitation of armaments, it is necessary to be clear about its characteristics. First, it is rooted in mutual fear rather than in mutual confidence between East and West. Should either side through some unforeseen means gain overwhelming superiority and break the nuclear stalemate or should the present instabilities of deterrence be lessened through the building of invulnerable retaliatory forces, the mutuality of interests discussed here would diminish. Second, these parallel interests represent a "negative consensus" in that the United States and Russia are agreed on what they do not want to happen (a strategic nuclear war), as distinguished from a "positive consensus" or agreement between their wider national purposes and interests. If there is a low degree of "positive consensus," the range of identical interests covered by the "negative consensus" as a rule will be overridden by these more substantive conflicting interests. Just how strong the "positive consensus" must be before an agreement embodying a "negative consensus" can be negotiated will be treated in detail later.

The substitution of political boundaries through arms control agreements for the disappearing technological limitations on the nature of war and the preparation for war, in effect, acknowledges that security is still dependent on national military power. Under this approach, disarmament operates as an adjunct of national military policy with the object of lessening (but not doing away with) the likelihood of war and of limiting the destructiveness of any war that does occur. This coincides

with the historic usage of disarmament by governments as a means of buttressing national military interests and not of surrendering them.

Up to now, we have been considering how hostile states, without first necessarily settling their differences, may be led to agree on political "rules of the game" to serve as boundaries within which their military rivalry can be carried on. It was noted that ironically the potential common interests America and Russia may have in declaring certain spheres of military activity out of bounds (such as, say, nuclear weapon testing and the militarization of outer space) actually arise out of the severe political antagonism between them.

Yet the fact remains that despite the build-up of strong pressures to bring the arms race under control, by their actions the United States and the Soviet Union have indicated that the risks accompanying any possible disarmament agreement they could obtain would be greater than the risks posed by an uncontrolled nuclear arms race. Consequently, it is doubtful that the "negative consensus" born out of mutual fear of a suicidal war can by itself serve as a suitable basis for any real progress towards arms control. In the final analysis, it is the conditions of the wider political environment which set the limits of the practicability of measures for arms limitation and reduction. To that point we now direct our attention.

The political environment. As we have already seen, the political prerequisite for drastic or total disarmament is an alteration of the fundamental organizational arrangement of international relations. In contrast, the acceptability of more limited controls on armaments depends

on the compatibility between the concrete national interests of the negotiating states. Where national interests are generally harmonious, as in the case of American-British relations, disarmament, however, is superfluous. Alternately, beyond a certain degree of political conflict, when it approaches the brink of war, disarmament is also doubtlessly impracticable. Paradoxically, as political tensions mount and the pressure for disarmament becomes stronger, the obstacles to the successful negotiation of arms reductions are multiplied. Thus it is frequently asserted that either a disarmament agreement is not needed or else it is impossible to obtain:

If disagreements on specific issues had been tractable, the armaments race would never have started. Since negotiations on outstanding disputes have proved unavailing, it is improbable that a disarmament scheme acceptable to all parties can be negotiated.¹

To be sure, the logic of disarmament is inherently paradoxical. But while a firm "positive consensus" (a coincidence between political purposes) is more conducive to agreement on disarmament, unless an element of "negative consensus" is present there is no incentive to negotiate. When there is an incentive to seek an agreement, hostile states inevitably find themselves caught on the horns of this dilemma: No disarmament is possible without mutual confidence engendered by the settlement of territorial questions and other grievances. Conversely, there can be no mutual confidence as long as opposing armed forces face each other menacingly. Hence, an arms pact can be sought in conjunction with a settlement of political differences or in advance of a political

¹ Kissinger, Nuclear Weapons and Foreign Policy, p. 208.

rapprochement.

Disarmament with political settlement. In the past voluntary disarmament agreements have depended almost entirely on the achievement of a political détente between the parties involved in the negotiations. The adjustment of conflicting national interests was coupled with provisions for adjusting military capabilities also. This was the case with both the Rush-Bagot Agreement of 1817 and the Washington Treaty of 1922, the two notable achievements of disarmament in modern times. Of course, a political settlement, whether or not a treaty stipulated it, would probably lead to a gradual reduction in the forces-in-being on both sides in any event. Here a formal agreement would serve the useful function of expediting the readjustment of military force levels to conform to the new political conditions created by the liquidation of tension sources.¹

In view of the enormously greater complexity of the military factor in the present age, almost certainly arms control will be an indispensable ingredient of any future peaceful settlement of major world problems, such as the Berlin situation and German reunification.² Even though the Soviet bloc and the Western alliance may come to the point where they may genuinely wish to arrive at a political accommodation by negotiating their differences, this does not automatically mean that they

¹ Hartmann, p. 300.

² Huntington suggests that "Just as the problem of armaments cannot be settled without reference to political issues, so is it also impossible to resolve these issues without facing up to the relative balance of military power." Huntington, p. 79.

will be able to do so. The ritual of lowering the guns that enemies have held on one another for years is a delicate operation. Indeed, one has difficulty in visualizing it taking place spontaneously and "naturally" in the present era where military strategy is based on deterrence psychology. But provided the political conditions are ripe for it, this relaxation in military postures might be accomplished through an international agreement containing procedures that would regularize and guarantee the reciprocal scaling down of military capabilities.

Disarmament without political settlement. Granted that the reconciliation of outstanding political differences is apt to be the most effective path to disarmament, it is nonetheless an improbable one as far as Soviet-American relations are concerned. The best that can realistically be expected in the foreseeable future are limited political adjustments directed at removing the sharpest edges from the Cold War. At least until a more stable political equilibrium is restored in Europe, it is difficult to imagine the conclusion of an agreement on even the smallest arms control measures. But assuming that the gap between American and Russian interests can be narrowed significantly through, say, a settlement of the German question, a large reservoir of tensions would still remain. So long as each side is firmly committed to achieving at whatever cost a different kind of political status quo, there is hardly room for consensual limits on military competition through arms control. But as Russia and the West move toward a common view of what the world should be like, if they do, arms control agreements of a progressively broader scope may prove feasible.

To sum up, in comparison with earlier periods in the disarmament movement, the political setting in which the negotiations now take place is marked, first, by a lower level of "positive consensus" and, second, by a higher level of "negative consensus," generally speaking. Traditionally, states have entered into agreements limiting their armed power only when their vital national interests were consonant. In the main, good faith of the participants, achieved prior to or in conjunction with the disarmament arrangements, was relied on to guarantee that the provisions would be carried out. It was not deemed necessary to write provisions into disarmament treaties setting up machinery for implementation, verification, and control. They were self-executing. Accordingly, heretofore, all voluntary disarmament agreements have been administratively unstructured and not highly formalized.

Conversely, in the present era there is potentially a stronger rationale for arms limitation agreements than previously. But there is insufficient mutual trust and confidence to allow the negotiation of a treaty where the parties are left on their own to execute the agreement. The United States and the Soviet Union allocate a substantial part of their economic resources to military purposes (about 10 per cent and 15 per cent, respectively, of their gross national products), which they would prefer to reduce. Both are anxious to avoid nuclear war. And both have a common interest in preventing the dillution of their power as the result of the diffusion of nuclear weapons. On the other hand, they are unwilling to enter into any agreement at the price of abandoning vital interests to which a greater priority is attached.

Since disarmament based primarily on mutual trust resulting from political accommodation appears incompatible with the contemporary political environment, there has arisen a need to devise an acceptable substitute for mutual confidence as a basis for arms control. Mainly for that reason, a reliable inspection and control apparatus (sometimes described as "institutionalized distrust") has emerged since 1945 as the sine qua non of any agreement regulating armaments. In short, this question is at the heart of the problem of negotiating disarmament.

Conclusion: The Problem of Inspection and Control

Having viewed the problem of disarmament from the perspective of how it is related to international affairs as a whole, we are now in a better position to look at the problem narrowly as it is manifested in the concrete issues that are the subject of bargaining in the negotiations.

The negotiation process is concerned with two different kinds of questions: (1) those relating to program (specific limitations and reductions of armaments or restraints on military activities) and (2) those relating to administration (the machinery and procedures for implementing and maintaining the substantive provisions of an agreement).

One area of problems in the negotiations, then, has to do with what disarmament. Proposals are designed primarily either to place restrictions on armaments or on the use of armaments (which entails no disarmament at all in a literal sense). Limitations on armaments may be quantitative (the ratio of capital ships allotted to the United States, Britain, Japan, France, and Italy under the Washington Treaty of 1922) or

qualitative (as were the restrictions imposed directly on the size and armament of submarines by the London Treaty of 1930, or as would be the indirect restriction of the development of nuclear weapons by prohibiting the testing of those weapons). Limitations on the use of armaments, rather than regulating the kinds and amounts of weapons states can have, seek to restrict the ways in which military capability is actually employed. Hypothetically, this may be accomplished directly through an agreement on the deployment and activities of military forces or indirectly such as through mutual inspection for the purpose of inhibiting surprise attack.

The other area of problems in the negotiations revolve around the means of ensuring that all parties abide by the terms of the disarmament agreement. Aside from relying on the honor of the participants, three approaches may be followed: (1) Countries may depend on their unilateral intelligence resources to assure themselves that the other participants are not cheating. (2) They may agree only to measures where compliance is self-evident, such as the banning of megaton nuclear detonations in the atmosphere. (3) Or an institutionalized inspection and control system may be established.¹

On both the question of the program and administration of disarmament, the negotiations more often than not have been stalemated. In the

¹Another point of semantic confusion needs clarification here. Through their usage in the negotiations, the distinction between the terms "inspection" and "control" has become blurred. They are now generally used interchangeably. But technically "inspection" implies only the performance of intelligence functions such as surveillance, disclosure, and verification while "control" identifies the source of ultimate enforcement authority. This source is either the individual states or some supranational agency.

conferences during the League period, however, the principal issues on which the success or failure of the negotiations seemed to depend were mainly with the program of disarmament. Contrariwise, since World War II the question of administering proposed limitations has been given top priority. The issues at the forefront in the naval conferences and the League-sponsored negotiations pertained to such matters as the nature of armaments to be produced and the definition of what armaments would be covered by a disarmament agreement. The issue of inspection and control was neither considered to be a particularly intractable problem nor was it mainly the most important one to be faced. Indeed, the Preparatory Commission of the League was able to agree unanimously on a detailed organizational framework for the supervision of disarmament which was adopted without modification at the World Disarmament Conference in July, 1932.¹ But meaning, ever came of it since the conference broke down in total collapse in May, 1934.

During the last seventeen years of the negotiations, in contrast, there has been a gradual convergence of Western and Soviet positions on the programmatic aspect of disarmament, coupled with fundamental, opposite approaches to the problem of inspection and control. The trend, especially in recent years, has been for both sides in unison to propose ambitious, and disarmament programs, even the most limited to date, and to make their acceptance contingent on the adoption of their particular approach to the implementation of the measures.

¹ Arnold J. Toynbee, Survey of International Affairs, 1931 (London: Oxford University Press, 1932), p. 185.

In this chapter we have seen how inspection and control fits into the total disarmament picture on a theoretical plane. Next, we shift our attention to an historical plane in order to observe the problem of inspection and control within the operational setting of the negotiations since 1945.

CHAPTER III

THE RECORD OF THE NEGOTIATIONS, 1945-1954

The institutional and political issues of inspection and control over which the United States and the Soviet Union are divided in the 1960's go all the way back to 1946 when the first attempts were made to bring atomic-age weapons under international control. This--the historical dimension of American and Soviet policies on disarmament controls--will be the subject of the next three chapters.¹ Specifically, we shall be concerned with two questions: first, the part that inspection and control has played in the disarmament negotiations as a whole and, second, the positions that the United States and the Soviet Union have taken over the years.

The Phases of the Negotiations

The postwar negotiations on disarmament have gone through some five different phases. Before taking them up in detail, let us briefly trace their chronological progression. From 1946 to 1950--the first phase--the focus of attention was on the internationalization of atomic energy. The Atomic Energy Commission (established by the General Assembly on January 24, 1946) and the Commission for Conventional Armaments (created by the

¹The following sources may be consulted for a more detailed diplomatic history of the disarmament negotiations since World War II: Bechhoefer, Post War Negotiations for Arms Control; Yves Collart, Disarmament: A Study Guide and Bibliography on the Efforts of the United Nations (The Hague: Martinus Nijhoff, 1958); Joseph P. Morray, From Yalta to Disarmament (New York: Monthly Review Press, 1961); Nogee, Soviet Policy Towards International Control of Atomic Energy; Anthony Nutting, Disarmament: An Outline of the Negotiations (New York: Oxford University Press, 1959).

Security Council on February 13, 1947) furnished the main setting for the deliberations.

From 1950 to 1952 the formal negotiations were broken off, mainly as a result of the Korean War. But with the merger of the Atomic Energy Commission and the Commission for Conventional Armaments into a single disarmament commission on January 11, 1952, the second phase of the disarmament conversations was inaugurated. Later, during the third phase, the forum of the negotiations shifted from the Disarmament Commission to the Subcommittee of Five which it established on April 19, 1954.

After the Soviet Union withdrew from the Subcommittee of Five in September, 1957, there were no further negotiations on general disarmament for more than two years. There were, however, a number of conferences on specialized arms control measures during this interval--the fourth phase. East-West technical experts held two conferences in Geneva during 1958: from July 1 to August 21 to consider the possibility of detecting violations of a nuclear test ban and from November 10 to December 13 to consider measures to prevent a surprise attack. Additionally, the Geneva Conference on the Discontinuance of Nuclear Weapon Tests met from October 31, 1958, through January 29, 1962. Finally, in the fifth phase, the talks on comprehensive disarmament were resumed by the Ten Nation Committee on Disarmament which met from March 15 through June 27, 1960. It was, in turn, supplanted by the Eighteen Nation Committee on Disarmament which began work in March, 1962.

With this road map of the disarmament negotiations in mind, let us now return to the beginning.

Phase I: The United Nations Atomic Energy Commission

The interval between the successful testing of the atomic bomb on July 15, 1945, near Alamogordo, New Mexico, and the opening session of the United Nations Atomic Energy Commission on June 14, 1946, was especially crucial. Many of the basic policies of the United States and the Soviet Union, including their general approaches to the problem of disarmament, were molded by what took place during those few months. On June 26--a few days before the Alamogordo experiment--the representatives of fifty countries, meeting at San Francisco, had signed the United Nations Charter, a pre-atomic age document. On August 6 and 9 atomic bombs were dropped on Hiroshima and Nagasaki. The next day the Japanese Government offered to surrender, thus bringing an end to the hostilities almost immediately after the Soviet Union had declared war on Japan.

Later, after five days of intensive consultations in Washington, President Truman, Prime Minister Attlee, and Prime Minister King issued a joint declaration on November 15 calling for the establishment of a commission under the United Nations to prepare recommendations for attaining

. . . the most effective means of entirely eliminating the use of atomic energy for destructive purposes and promoting its widest use for industrial and humanitarian purposes.¹

Three assumptions about atomic technology were cited by the Truman-Attlee-King Declaration in support of the need for a revolutionary politi-

¹Joint Declaration by the Heads of Government of the United States, the United Kingdom, and Canada, November 15, 1945," in Documents on Disarmament, 1945-1949, I, 2.

cal approach: (1) Atomic weapons, because they have "placed at the disposal of mankind means of destruction hitherto unknown," are in a special class by themselves. (2) There can be no adequate military defense against them. (3) Lastly, no nation can for long maintain a monopoly over these weapons.¹ With modifications, these premises have continued to guide American thinking on the question of nuclear disarmament.

Next, the proposal made by the Truman-Attlee-King Declaration was presented at the Big Three Council of Foreign Ministers meeting at Moscow in December in order to gain the concurrence of the Soviet Union. In the communique issued on December 27, Foreign Minister Molotov agreed to Russian co-sponsorship of a resolution in the General Assembly creating a commission along the lines proposed by the United States, the United Kingdom, and Canada. For reasons that were not entirely apparent at the time, however, he was insistent on one point--that it be clearly understood that the commission was to be under the direction of the Security Council "in matters affecting security."²

Following the exact wording of the Moscow communiqué, at its first session in London the General Assembly unanimously passed a resolution establishing a commission for the control of atomic energy composed of the members of the Security Council and Canada when Canada was not a member

¹ Ibid., p. 1.

² Moscow Communiqué by the Foreign Ministers of the United States, the United Kingdom, and the Soviet Union [extracts], December 27, 1945, in ibid., p. 5.

of the Council. Under its terms of reference, the Atomic Energy Commission (AEC) was given a mandate to make specific proposals in four areas:

- (a) for extending between all nations the exchange of basic scientific information for peaceful ends;
- (b) for control of atomic energy to the extent necessary to ensure its use only for peaceful purposes;
- (c) for the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction;
- (d) for effective safeguards by way of inspection and other means to protect complying states against the hazards of violations and evasions.¹

At least in principle, then, the great powers were agreed at the outset on the necessity of international control and the elimination of nuclear weapons from national arsenals. The troubles that lay just ahead were to arise out of the failure to reach an accord on concrete measures for implementing these general goals.²

Anticipating the favorable action of the General Assembly, Secretary of State Byrnes had proceeded in early January, 1946, to appoint a committee headed by Under Secretary of State Acheson to "study the subject of controls and safeguards necessary to protect this Government."

¹General Assembly Resolution 1(I): Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy, January 24, 1946, in *ibid.*, p. 7.

²The negotiation process in disarmament conferences may be divided analytically into two stages: (1) setting the general objectives that the negotiations will seek to accomplish (usually done in a debate on the terms of reference or the agenda of the negotiations); and (2) bargaining on specific actions to be taken on the basis of these agreed principles. Only in a few cases have the deliberations progressed beyond the first stage.

³U. S., Department of State, International Control of Atomic Energy: Growth of a Policy, Department of State Publication No. 2702 (Washington:

To assist it in "analyzing and appraising all the relevant facts and formulating proposals," the Secretary of State's Committee, in turn, appointed a Board of Consultants with David E. Lilienthal as chairman.¹

The labors of the Secretary of State's Committee and the Board of Consultants culminated in the issuance of A Report on the International Control of Atomic Energy (otherwise known as the Acheson-Lilienthal Report) which was made public on March 28, 1946, ten days after Bernard Baruch was designated as the United States representative on the United Nations Atomic Energy Commission.² The Acheson-Lilienthal Report did not purport to lay out the plan to be presented to the Atomic Energy Commission. But with the exception of the provisions for enforcement tacked on by Baruch, it turned out to be the American blueprint for atomic energy development.

Therefore, from the tone of official statements, the Soviet government months in advance undoubtedly gained a clear picture of what the line of American policy would be when the AEC began its work in June. On the other hand, the Russians gave no prior indications of the stand they would take although American policymakers were fully aware of the

U. S. Government Printing Office, 1946), p. 34. (Cited hereafter as Growth of a Policy.) Others named to the Committee were John J. McCloy, Dr. Vannevar Bush, Dr. James Conant, and General Leslie R. Groves.

¹The Board of Consultants also included Chester I. Barnard, Dr. Robert Oppenheimer, Dr. Charles Allen Thomas, and Harry A. Winne. Ibid.

²U. S., Department of State, A Report on the International Control of Atomic Energy, Department of State Publication No. 2498 (Washington: U. S. Government Printing Office, 1946).

Soviet aversion to the foreign intrusions necessitated by any system of international control.¹

Indeed, the Kremlin seemed to be carefully refraining from making any significant pronouncements on atomic policy at this juncture. American officials were puzzled by the apparent nonchalance shown by Soviet leaders toward atomic weapons. When President Truman informed Stalin on July 24, 1945, at the Potsdam Conference that the United States had perfected the atomic bomb, Stalin's only comment was that "he was glad to hear of the bomb and hoped we would use it."² At the Moscow foreign ministers meeting in December, 1946, Molotov requested that the proposal for a United Nations commission on atomic energy be placed at the bottom of the agenda, as if to further play down the importance attached to the new superweapon by the Soviet Union.³ Even after the actual negotiations commenced, Soviet statements on atomic energy for the most part continued to be enigmatic and shadowy.

The Baruch Plan

As the representative of the host country, Bernard Baruch served as chairman of the first meeting of the Atomic Energy Commission on June 14, 1946, at Hunter College in New York City. Quickly brushing aside

¹Bernard Baruch pondered whether it was reasonable to expect that the Russians would ever allow inspection of their atomic resources when they "would not even allow American newspapermen behind the Iron Curtain." Margaret L. Coit, Mr. Baruch (Boston: Houghton Mifflin Company, 1957), p. 563.

²James F. Byrnes, Speaking Frankly (New York: Harper and Brothers, 1947), p. 263.

³Ibid., p. 266.

the formalities, he rushed into a detailed exposition of the American plan for dealing with the problem of atomic energy. He introduced it with this solemn warning:

We are here to make a choice between the quick and the dead. That is our business. Behind the black portent of the new atomic age lies a hope which, seized upon with faith, can work our salvation. If we fail, then we have damned every man to be the slave of Fear. Let us not deceive ourselves: We must elect World Peace or World Destruction.¹

At the center of the scheme proposed by Baruch was an International Atomic Development Authority, to be entrusted with "all phases of the development and use of atomic energy."² Dual control functions were envisaged: (1) It would exercise direct "managerial control or ownership of all atomic-energy activities potentially dangerous to world security." (2) It would supervise all other uses of atomic energy indirectly through the "power to control, inspect, and license."³ The first sector of atomic energy would be wholly internationalized while the second would be carried on at the national level. In addition to its negative regulatory responsibilities, the ADA was vested with two positive functions: first, fostering the beneficial uses of atomic energy and, second, "research and developmental activities of an affirmative character to put the Authority in the forefront of atomic knowledge."⁴ This was to enable it to better comprehend and detect the misuses of atomic energy.

¹Documents on Disarmament, 1945-1959, I, 7-3.

²Ibid., p. 10.

³Ibid., pp. 10-11.

⁴Ibid., p. 11.

In the second place, Baruch demanded that provisions be made for "condign punishments" of violations of the proposed rules of control.¹ Since any decision by the United Nations to punish violations would be taken in the Security Council where the big powers had veto privileges, Baruch called for the abrogation of the veto in matters relating to atomic energy. This he regarded as the sine qua non of any acceptable arrangement. Consequently, it was pressed harder than any other parts of the American proposal.²

As the plan of control was implemented in successive stages, Baruch pledged that the United States would gradually transfer its atomic holdings over to the ADA, cease to manufacture atomic bombs, and dispose of existing bombs. No specific timetable was given for the execution of these stages, however, bringing forth an accusation by the Russians that once the control apparatus was set up, there was no guarantee that the United States would, in fact, give up its atomic monopoly.³

The Russian Plan

The Commission did not meet again until June 10, five days after the world learned about the atomic future as the United States visualized it. The unveiling of Russian policy by Andrei Gromyko was awaited

¹ Ibid.

² Bernard M. Baruch, Baruch: The Public Years (New York: Holt, Rinehart, and Winston, 1960), p. 372.

³ Many of the technical details of the Baruch Plan were outmoded by later technological advances in nuclear science and accordingly are not treated in detail here. The operation of the Atomic Development Authority as it was contemplated by the United States was further elaborated in three memoranda submitted to the Atomic Energy Commission on July 2, 5, and 12, 1946. See Documents on Disarmament, 1945-1950, I, 25-42.

expectantly. The first signs had seemed to point to an eventual agreement.¹ Baruch and his associates were optimistic about the possibilities of coming to terms with the Russians.² But as Gromyko began to speak, these hopes were dashed.

In contrast to the minute mechanical details spelled out by the Baruch Plan, Gromyko limited himself to the presentation and elaboration of two draft resolutions. One called for a prohibition of atomic weapons and another sought to establish a committee for the exchange of atomic information and a committee "for the prevention of the use of atomic energy to the detriment of mankind."³

As "one of the primary measures to be taken," Gromyko proposed the conclusion of

. . . an international convention prohibiting the production and employment of weapons based on the use of atomic energy for the purpose of mass destruction.⁴

Specifically, the parties to the convention would obligate themselves

- (a) not to use atomic weapons in any circumstances whatsoever;
- (b) to prohibit the production and storing of weapons based on the use of atomic energy;
- (c) to destroy, within a period of three months from the day of the entry into force of the present convention, all stocks of atomic energy weapons whether in finished or unfinished condition.⁵

¹ Coit, p. 589.

² Baruch, Baruch: The Public Years, p. 374.

³ Documents on Disarmament, 1945-1959, I, 22-23.

⁴ Ibid., p. 18.

⁵ Ibid., p. 21.

Gromyko then added portentously that:

This act should be followed by other measures aiming at the establishment of methods to ensure the strict observance of the terms and obligations contained in the above-mentioned convention. . . .¹

In no event, however, was this to include the modification of the veto power in the Security Council for such a move would be "incompatible with the interests of the United Nations" and therefore "must be rejected."² Instead of international enforcement, it was urged that national legislation "providing severe penalties for violators of the statutes of the present convention" be passed within six months after the treaty came into effect.³

On three critical points the Gromyko statement was at variance with the provisions in the Baruch proposals. First, and most important, on the question of the priority of the outlawing of atomic weapons as against the establishment of a system of international controls, the Soviet and American positions were diametrically opposed. In effect, the Russians wanted to begin by prohibiting the bomb as the essential precondition for beginning discussions of the matter of effective safeguards. Conversely, the Americans were unwilling to talk in definite terms about dismantling their atomic stockpile until the Russians accepted the idea of international control. The sequence of the steps to be taken became the dominant issue in subsequent atomic energy negotiations.

¹Ibid., p. 18. Italics added.

²Ibid., p. 24.

³Ibid., p. 21.

Next, it was apparent from Gromyko's remarks that the Soviet Union favored the overall development of atomic energy under the aegis of national governments rather than under an international organization of the type outlined by Baruch.

Finally, Gromyko let it be known from the beginning that the Soviet Union would not countenance any change in the voting formula in the Security Council. The veto privilege on questions of substance allowed the Soviet Union to protect its interests in the face of a potentially hostile Security Council majority.

The Exploratory Negotiations: 1946

By the time the Atomic Energy Commission terminated its work on July 29, 1949, a total of 24 plenary sessions and 179 meetings of its various committees had been held. Yet during all of that time neither the United States nor the Soviet Union retreated from any of the fundamental principles that each had enunciated during the initial meetings of the AEC. Substantively speaking, neither party had anything new to say to the other after the opening round of the talks. The first few months of the deliberations, however, did serve the useful function of clarifying and bringing into sharp focus the divergences between the approaches of the two sides. But the same cannot be said about the later phases of the discussions which, with increasing frequency, degenerated into acrimonious debates only remotely related to the substantive issues of atomic energy control.

In the negotiations during 1946 some semblance of allied unity had carried over from the recently ended war. Simultaneously with the atomic

energy deliberations going on in New York, the Council of Foreign Ministers from July 29 to October 15 were laboring in Paris on draft treaties with Bulgaria, Finland, Hungary, Italy, and Rumania.¹ Most likely, this was a key factor behind the Soviet strategy of avoiding a showdown over the atomic-energy question by steering clear of a definitive repudiation of all of the basic concepts contained in the Baruch Plan.

To no avail, other members of the AEC attempted to elicit from the Soviet delegate further details spelling out exactly what the Russians had in mind. Finally, at the second meeting of Committee Two on July 24, over a month after the American plan had been tabled, Gromyko addressed himself directly to the Baruch proposals. Arguing that under the Charter the Security Council already was "empowered to deal with matters relating to the control of atomic energy" and that abandonment of the principle of unanimity of the permanent members of the Security Council would violate national sovereignty, he concluded that

. . . the American proposals as they are presented now cannot be accepted by the Soviet Union either as a whole or in their separate parts.²

Making no headway in bridging the political gap between the American and Soviet viewpoints, the Commission at the end of July decided to turn to an exploration of the technical basis of international control in hopes of moving the negotiations off dead center. The Scientific and Technical Committee, made up of prominent scientists representing each of the twelve members of the AEC, was directed to submit a report on

¹Facts on File, 1946, p. 331.

²Growth of a Policy, pp. 81-82.

. . . the question whether effective control of atomic energy is possible, together with an indication of methods by which . . . effective control can be achieved.¹

In a series of eighteen informal closed-door meetings during August, the Committee hammered out a unanimous report that was submitted to Committee Two of the AEC on October 2. This was the only formal agreement of substance reached between the United States and the Soviet Union during three years of extensive negotiations. The report stated guardedly that

. . . we do not find any basis in the available scientific facts for supposing that effective control is not technologically feasible.²

Accepting the report of the Scientific and Technical Committee as the basis for future discussions, Committee Two between October 15 and December 13 continued the deliberations on a technical plane by considering specific safeguards against the three general kinds of possible violations: the diversion of materials, clandestine operations, and the open seizure of materials or atomic facilities.³ Progress was made in the sense of defining technically sound procedures, but that ignored the vital question of what was politically acceptable.

¹Ibid., p. 85. This created a precedent for two later conferences of experts in 1953 to consider the technical aspects of nuclear test detection and surprise attack prevention. See infra, Chapter V.

²U. N., Atomic Energy Commission, Official Records: Special Supplement, Report to the Security Council, 1946, p. 37.

³U. S., Department of State, International Control of Atomic Energy: Policy at the Crossroads, Department of State Publication No. 3161 (Washington: U. S. Government Printing Office, 1948), p. 44. (Cited hereafter as Policy at the Crossroads.)

Meanwhile, the United States, to the displeasure of several other members of the AEC, including Britain and Russia, was unwilling to see the debate drag on indeterminately.¹ Already on September 17, Baruch had sent a report to President Truman acknowledging that:

We see no possibility of reconciling these views. . . . Agreement could be effected only through a drastic change in the Soviet position or through a sacrifice by us of the very principles which were unanimously endorsed by the United Nations last year. . . .²

And as far as the American delegation was concerned

. . . there could be no surrender of essentials. The goal was a "unanimous report" favoring the American plan; no alternative would be considered.

So on November 12, under American prodding, the Commission (with Russia abstaining) resolved to submit its report to the Security Council by the following December 1st. Baruch was particularly anxious to have the vote on the report before the end of the year because the patronage of Egypt, Mexico, and the Netherlands, all supporters of the American position, expired then.³ The final vote, in fact, did not come until December 14 when the AEC approved its five-part First Report by a 12-0

¹ Baruch, Baruch: The Public Years, p. 173.

Ibid., pp. 174-175.

Coit, p. 124.

² U. N., Atomic Energy Commission, Official Records, 31st Meeting, November 12, 1946, pp. 77-78.

Byrnes, p. 277.

margin (Poland and the Soviet Union abstaining).¹

The bulk of the material in the First Report grew out of the work by the Scientific and Technical Committee and Committee Two on technical safeguards, reflecting a tendency to shun the basic political cleavages which threatened to wreck the negotiations altogether. Here again the Commission was prodded by Baruch to choose between the American and Russian plans. On December 5 he made a series of specific proposals for inclusion as "General Findings" and "Recommendations" in the AEC report.² With only minor changes these were ultimately incorporated into the document presented to the Security Council.

In essence, the "General Findings" and "Recommendations" were nothing more than a recapitulation of the points enunciated in the initial Baruch statement to the AEC. Six months of diligent negotiations had neither added to nor subtracted from the Baruch Plan.³

Ordinarily, after clarifying the positions of the two sides and showing them to be irreconcilable, there would have been no reason for continuing to negotiate further. But on an issue so vital as the control

¹ U. N., Atomic Energy Commission, Official Records: Special Supplement, Report to the Security Council, 1946. The voting figures cited in this study list the number for, against, and abstaining, in that order

² U. N., Atomic Energy Commission, Official Records, Seventh Meeting, December 5, 1946, pp. 39-92. For the text of Baruch's proposals see U. N., Atomic Energy Commission, Official Records: Supplement No. 2, Annex 4, 1946, pp. 13-17.

³ Although the American proposal continued to be known as the Baruch Plan, on January 4, 1947, Baruch resigned as United States Representative on the Atomic Energy Commission. In March, 1947, Frederick Osborn was appointed as Deputy Representative on the Commission and served until the spring of 1949.

of atomic energy, the world was unwilling to accept the verdict of the first months of the Western-Soviet negotiations, and great pressure was brought to bear for their continuance.

The Stalelated Negotiations: 1947-1949

In the background of the proceedings of the Atomic Energy Commission from 1947 through 1949 were mounting East-West political tensions which provided an atmosphere less and less conducive to any meaningful diplomatic discussions. Consideration of the First Report by the Security Council was held up from January to February 14, 1947, by procedural wrangling over whether to take up the AEC Report or the question of general disarmament first, and then by a deadlock over the terms of reference of the new Commission for Conventional Armaments. When the Security Council finally got around to considering the recommendations made by the Atomic Energy Commission, it was met by a Russian counter-proposal in the form of twelve amendments to the First Report. These amendments, presented on February 13, constituted the most important Russian policy pronouncement since the Gromyko speech on June 19 of the previous year.¹

Although the language of the document was equivocal, two apparent "concessions" that went beyond the initial Russian proposal were advanced:

1. Acceptance of the principle of international control:

¹"Soviet Proposal Introduced in the Security Council: Draft Amendments and Additions to the First Report of the United Nations Atomic Energy Commission, February 13, 1947," in Documents on Disarmament, 1945-1959, I, 61-64.

To be effective, such a convention [outlawing the production, possession, and use of atomic weapons] must provide for the establishment of a comprehensive system of international control including supervision and inspection to ensure the carrying out of the terms of the convention and to protect complying states against the hazards of violations.¹

The system of control, however, "must be administered within the framework of the Security Council" (where the veto would be applicable). Moreover, it was implied that there would be two separate conventions, one outlawing atomic weapons followed by one setting up the control machinery.²

2. Acceptance of majority decisions in the control organ in day to day operations:

The control organs and the organs of inspection should carry out their control and inspection functions, acting on the basis of their own rules which should provide for the adoption of decisions, in appropriate cases, by a majority vote.³

It was perfectly clear that the invoking of sanctions was not one of the "appropriate" cases.

Although the substantive position of the Soviet Union had changed little, if at all, an element of flexibility was introduced, which pro-

¹ Ibid., p. 62.

² Frederick Osborn, "The USSR and the Atom," Negotiating with the Russians, eds. Raymond Dennett and Joseph E. Johnson (Boston: World Peace Foundation, 1951), pp. 219-220.

³ Documents on Disarmament, 1945-1959, I, 63. Italics added. Both of these concessions were first revealed by Foreign Minister Molotov in a speech before the First Committee of the United Nations General Assembly on December 4, 1946, the day before Baruch began to push for a vote by the AEC on the American plan. (The text of the speech is printed in New York Times, December 5, 1946, p. 23.)

vided an impetus to renew the negotiations. Thus after seven inconclusive meetings devoted largely to a debate of the Russian amendments, the Security Council on March 10, 1947, unanimously passed a resolution returning the First Report, along with the Soviet amendments to it, to the Atomic Energy Commission for further study. A second report, to be submitted before the beginning of the second session of the General Assembly the following September, was requested.¹

For the first time since adopting its report to the Security Council at the end of December, the AEC reassembled on March 9, 1947, to resume its work during an especially crisis-ridden period. On March 12 the Truman Doctrine (enounced in a presidential address before Congress requesting aid to Greece and Turkey) declared ideological war on Communism by proclaiming that "at the present moment in history nearly every nation must choose between alternative ways of life."² On May 31 the non-communist government of Hungary was overthrown. On July 2 at a conference of British, French, and Russian foreign ministers in Paris, Molotov rejected the proposal for an overall American program of economic aid to Europe made by Secretary of State Marshall on June 5 in his now famous Harvard address. The effect was more or less to solidify the break between Eastern and Western Europe and to crystallize the formation of rival blocs.

¹U. N., Security Council, Official Records, 117th Meeting, March 10, 1947, pp. 437-438.

²U. S., Department of State Bulletin, XVI (March 23, 1947), 536.

The deterioration of American-Soviet relations was reflected in the growing obstreperousness of Russian behavior in the deliberations of the AEC during 1947. In carrying out the instructions of the Security Council, the Commission had divided its work between two standing committees--the Working Committee and Committee Two. The Working Committee in some twenty meetings from April 8 to mid-July examined the twelve amendments proffered by the Soviet Union. Committee Two was charged with the task of elaborating the concrete details of a control plan for atomic energy based on the principles contained in the First Report. Altogether, from April 8 to September 8 Committee Two and its seven working groups held ninety-one meetings.¹ But the Soviet Union refused to participate actively in these proceedings on the grounds that it had not accepted the First Report. So there was not even a facade of negotiations there. And in the Working Committee, where the Soviets took the initiative, their propaganda tactics were more blatant and transparent than in earlier meetings.²

Amid the flurry of activity of the committees, as they strove to meet the deadline for reporting set by the Security Council, Andrei Gromyko requested a plenary meeting of the Commission on June 11 at which he outlined the only definitive plan of his government since the talks began.³ Basically, he proposed that

¹Policy at the Crossroads, pp. 187-190.

²For an interesting account of Russian propaganda maneuvers, see Osborn, pp. 209-236.

³"Soviet Proposals Introduced in the United Nations Atomic Energy

directed at clarifying the contents of the recent proposal.¹ Gromyko's reply was the most unambiguous official statement of Russian policy made during the course of the negotiations. He confirmed that:

The conclusion of a convention prohibiting atomic weapons is a foremost and urgent task in the establishment of international control of atomic energy. After the conclusion of [the] convention on the prohibition of atomic weapons, another convention can and must be concluded, to provide for the creation of an international control commission and for the establishment of other measures of control and inspection.²

He also revealed that what the Soviet Government had in mind was inspection of declared plants and facilities only; that supervision, management, and licensing could not be considered as legitimate forms of "strict and effective international control"; that the proposed International Control Commission would have no compulsory powers over national governments; and that the Soviet Union would entertain no move to modify the unanimity principle of the great powers in the Security Council.

In short, the Soviets were willing to accept in principle the doctrine of international inspection which became the major theme of the negotiations on partial disarmament measures in the 1950's. But, at the same time, they continued to reject out of hand the two concepts that formed the nucleus of the Baruch Plan--managerial control or ownership of "dangerous" atomic-energy activities and sanctions meted out by the Security Council without the prerogative of the veto.

¹ The text of the Cadogan-Gromyko letters is printed in ibid., pp. 90-93.

² Ibid., p. 91. Italics added.

Only Poland received the Soviet plan warmly and hopefully. The other members of the AEC felt that the technical studies already completed clearly demonstrated the inadequacy of the Soviet approach. Accordingly, on August 15, 1947, in Committee Two they passed a resolution expressing the conviction that "these proposals do not provide an adequate basis for the development by the Committee of specific proposals¹ for an effective system of international control of atomic energy."

Having turned back the Soviet attempt to elicit a compromise on basic principles, the Commission then proceeded to follow through with its original intention of presenting a detailed international control program to the Security Council grounded on the principles stated in its First Report. This it did in the bulky Second Report approved on September 11, 1947, by a 10-1-1 vote (Russia opposing and Poland abstaining).²

For fifteen months the Commission had managed to avoid total paralysis by confining its activities largely to an investigation of the scientific and technical requirements of a system for the international control of atomic energy. In effect, the Second Report marked the completion of that task. It reiterated three technically irrefutable principles of atomic control:

1. Decisions concerning the production and use of atomic energy should not be left in the hands of nations.

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Policy at the Crossroads, p. 115.

²U. N., Atomic Energy Commission, Official Records, Second Year: Special Supplement, Second Report to the Security Council, U. N. Document AEC/26, September 11, 1947.

2. Policies concerning the production and use of atomic energy which substantially affect world security should be governed by principles established in the treaty or convention which the agency would be obligated to carry out.
3. Nations must undertake in the treaty or convention to grant to the agency rights of inspection of any part of their territory, subject to appropriate procedural requirements and limitations.¹

It also spelled out the following basic measures for implementing these principles:

- (a) production quotas based on principles and policies specified in the treaty or convention;
- (b) ownership by the agency of nuclear fuel and source material;
- (c) ownership, management, and operation by the agency of dangerous facilities;
- (d) licensing by the agency of non-dangerous facilities to be operated by nations; and
- (e) inspection by the agency to prevent or detect clandestine activities.²

Because the technical aspects of the problem had been pursued as far as possible, the fundamental divergence between East-West political views on the functions and powers of the international agency had to be reconciled before the AEC could move any further. That this was more unlikely than ever was reflected in the agenda of the Security Council which was so crowded with security questions that the Second Report was never considered formally. The stream of political events, too, seemed to be moving toward a showdown between the Soviet Union and the Western powers. Between September, 1947, and February, 1948, the Communist hold over Bulgaria, Rumania, Poland, and Czechoslovakia

¹Ibid., p. 2.

²Ibid.

was solidified through coups and the suppression of opposition groups. Western apprehensions were further magnified in June, 1948, when the Berlin Blockade was instituted and kept in effect until May, 1949, by the Russians.

In the meantime, from January through March, 1948, the AEC probed the Soviet position further without a particle of success. Committee Two, after two formal meetings and a number of informal consultations on the subject of the organizational structure of the proposed control agency, adjourned sine die.¹ Concurrently, the Working Committee subjected the Soviet plan of June 11, 1947, to careful scrutiny. After ten futile meetings, the Committee passed a resolution on April 5, 1948, stating that "no useful purpose can be served by further discussion" of the Soviet proposals because they "ignore the existing technical knowledge of the problem of atomic energy control [and] do not provide an adequate basis for the international control of atomic energy. . . ."²

On May 17, 1948, over the opposition of the Soviet Union and the Ukraine, the Atomic Energy Commission approved a Third Report to the Security Council stating that "it has reached an impasse" and recommending that further negotiations at the Commission level be suspended.³ The United States on June 22 sponsored a draft resolution in the Security

¹U. N., Department of Public Information, Yearbook of the United Nations, 1947-48, p. 463.

²Ibid., p. 470.

³U. N., Atomic Energy Commission, Official Records: Special Supplement, Third Report to the Security Council, May 17, 1948, p. 1.

Council which would have accepted the three AEC reports as the basis for the international control of atomic energy. As expected, the Soviet Union cast a negative vote, which vetoed the proposal since it was a substantive question. The Council then proceeded to adopt a procedural resolution (which requires only a majority vote) referring the AEC reports to the General Assembly "as a matter of special concern."¹

During the General Assembly debate on these reports, which lasted from September 30 to November 4, 1948, the Soviet Union introduced a draft resolution embodying the most significant concession it had made yet in the negotiations. In June, 1946, a convention outlawing atomic weapons was proposed, with no mention of international controls; and in February, 1947, this was modified by the call for a convention of prohibition to be followed by the conclusion of a convention on control. Now, on October 2, 1948, the Soviet Union further extended its position by recommending that the Atomic Energy Commission be directed to

. . . prepare a Draft Convention on the prohibition of atomic weapons and a Draft Convention on the establishment of effective international control of atomic energy, both the Convention on the prohibition of atomic weapons and the Convention on the establishment of international control over atomic energy to be signed and brought into operation simultaneously.²

The Western countries saw this move as a propaganda maneuver rather than a gesture that could lead to bona fide negotiations, judging from

¹U.N. Document S/336, June 11, 1948, and U. N. Document S/851, June 22, 1948, in Documents on Disarmament, 1945-1959, I, 172-173.

²U. N. Document A/C.1/310, October 2, 1948, in ibid., pp. 177-178. Italics added.

menacing Soviet actions in Europe at that time. Furthermore, there was no hint that the Russians were willing to go beyond their earlier offer of periodic inspection of declared facilities, which was entirely unacceptable to the West. Although some of the representatives of smaller states, such as Belgium, expressed a keen interest in what the Russians had proposed, the United States and Great Britain lined up overwhelming support in defeating the Soviet draft resolution on November 4 by a vote of 6-40-5. By a similar margin (40-6-4), the General Assembly on the same day adopted a resolution approving the recommendations of the AEC majority "as constituting the necessary basis for establishing an effective system of international control of atomic energy to ensure its use only for peaceful purposes and for the elimination from national armaments of atomic weapons. . . ." ¹

Upon the insistence of the smaller nations, the resolution also requested the six permanent members of the Atomic Energy Commission to enter into consultations "in order to determine if there exists a basis for agreement on the international control of atomic energy. . . ." ²

In accordance with the General Assembly's request, the AEC reconvened on February 18, 1949, for the first time since May, 1948. The fourteen meetings that followed were marked by some of the most strident debates and sharp verbal attacks of any of the American-Russian negotiations during the Cold War. The Russians reintroduced and pressed relentlessly

¹ General Assembly Resolution 191 (III), November 4, 1948, in ibid., p. 178.

² Ibid.

their proposal for simultaneous conventions in an attempt to show up the "unreasonableness" and "inflexibility" of the Western position. Finally, in exasperation the Commission on July 29, 1949, adopted two resolutions. By a vote of 7-2-2 (the Soviet Union and the Ukraine opposing, Argentina and Egypt abstaining) it summarily rejected the Russian proposal to instruct the AEC to prepare two separate conventions to be executed simultaneously. Over the opposition of the Soviet Union and the Ukraine, it also reported to the Security Council that an impasse still existed in the Commission and again recommended that there be no further discussions in the Atomic Energy Commission "until such time as the sponsoring powers have reported that there exists a basis for agreement."¹

In turn, the Security Council again brought the matter to the attention of the General Assembly and called on the permanent members to engage in special private consultations to seek a basis for an agreement. Fourteen private meetings were held, beginning on August 9, 1949. During the course of these meetings, two fateful events occurred, presaging the final breakdown of the atomic energy negotiations. On September 23 President Truman announced that the United States had detected an atomic explosion in the Soviet Union "within recent weeks."² And in November the Chiang Kai-shek government fled from mainland China to Formosa.

¹ U. N. Documents AEC/42 and AEC/43, July 29, 1949, in ibid., p. 200.

² "Statement by President Truman Regarding Atomic Explosion in the Soviet Union, September 23, 1949," in ibid., p. 207.

At the fourteenth meeting of the six-power consultation group on January 19, 1950, the Soviet demand that the Chinese representative be excluded was refused. The Soviet representative then walked out of the meeting (following the lead of Russian delegations in several other United Nations organs which began with a boycott of the Security Council on January 10).¹ Neither the Atomic Energy Commission nor any of its committees ever met again.

Phase I: The Commission for Conventional Armaments

While the United States seized the initiative in the negotiations for the international control of atomic energy by advancing most of the proposals that were considered, the Soviet Union took the lead in pushing for the reduction of conventional armaments and armed forces. Here the United States was on the defensive since it was in a distinctly inferior bargaining position, having unilaterally trimmed its forces from 12 million men in 1945 down to 1.5 million in 1948.² The Soviet Union, on the other hand, continued to maintain large conventional forces. Consequently, the roles occupied by the protagonists in the Atomic Energy Commission were reversed in the Commission for Conventional Armaments.

Initially, the question of general disarmament was raised in the United Nations by Soviet Foreign Minister Molotov in a speech before the General Assembly on October 29, 1946. After attacking the motivation of

¹U. S., Department of State, United States Participation in the United Nations: Report by the President to the Congress for the Year 1950, Department of State Publication No. 4178 (Washington: U. S. Government Printing Office, 1950), p. 112.

²U. S., Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1961, p. 240.

the Baruch Plan, he submitted a draft resolution stating that "the General Assembly considers a general reduction of armaments necessary" and that the primary objective of such a reduction should be "the prohibition of the production and use of atomic energy for military purposes."¹ It also recommended that the Security Council take action to provide for the practical achievement of these objectives. This draft resolution implied that the reduction and elimination of atomic and non-atomic armaments should be considered jointly and that the Atomic Energy Commission (where Russian proposals were then faring badly) would be bypassed in doing so.

A further Soviet draft resolution, introduced on November 29, confirmed these implications.² Two "organs of inspection" would be established "within the framework of the Security Council"--one for executing the decision regarding the reduction of conventional armaments and one for executing the decision regarding the prohibition of atomic weapons.

Ultimately, the Soviet Union accepted an amended version of a vaguely worded American draft resolution covering the general principles of both atomic and non-atomic disarmament, which was adopted unanimously by the General Assembly on December 14, 1946.³ Among other things, the resolution recognized "the necessity of an early general regulation and

¹Policy at the Crossroads, pp. 59-60.

²"Soviet Draft Resolution Introduced in the First Committee of the General Assembly: Regulation and Reduction of Armaments, November 29, 1946," U. N. Document A/C.1/87, November 29, 1946, in Documents on Disarmament, 1945-1959, I, 42-43.

³General Assembly Resolution 41 (I), December 14, 1946, in ibid., pp. 34-35.

reduction of armaments and armed forces" and recommended that the Security Council formulate practical measures to be considered by the Assembly and ratified by the individual states. Moreover, it affirmed that an essential part of the regulation of armaments and armed forces "is the provision of practical and effective safeguards by way of inspection and other means to protect complying States against the hazards of violations and evasions."¹

Pursuant to the above-mentioned resolution, the Security Council on February 13, 1947, adopted a resolution by a 10-0-1 vote (Russia abstaining) setting up a Commission for Conventional Armaments after a sharp clash over the terms of reference of the new organ.² The United States insisted that its jurisdiction must not overlap with that of the AEC. The Soviet Union, however, maintained that no qualitative distinction could be made between atomic and conventional weapons and that they should therefore be considered together. The resolution, which accepted the American viewpoint, directed the Commission for Conventional Armaments (CCA) to prepare proposals for the general regulation and reduction of armaments in areas outside the competence of the Atomic Energy Commission and "for practical and effective safeguards" in connection with these measures.³

¹Ibid., p. 48.

²U. N. Documents S/268/Rev. 1, February 13, 1947, and Corr. 1, February 14, in ibid., pp. 60-61. The Commission for Conventional Armaments was composed of members of the Security Council.

³Ibid., p. 60.

The CCA convened on March 24, 1947, and immediately bogged down over the question of what its plan of work and rules of procedure should be. A subcommittee of the five permanent members, meeting from April 24 to June 6, failed to iron out the differences between the American and Russian stands. The United States objected particularly to the Soviet draft plan of work because it would have allowed the Commission to take "into account the prohibition of atomic weapons"--a matter beyond the scope of its inquiry.¹ In the end, the Commission (with the Soviet Union and Poland abstaining) accepted the American work plan which was identical with the terms of reference already set by the Security Council.² The Soviet representative, however, indicated that he would not abide by the terms set by the majority, and he, in fact, did not. This was the sum total of the results of the first nine meetings of the CCA.

On July 16, 1947, the Commission created a Working Committee of the whole which, between August 20, 1947, and September 21, 1948, held twenty meetings. Here, too, the debate was on a superficial level, unlike the first part of the proceedings of the Atomic Energy Commission. During the first four meetings, the definition of the weapons under the jurisdiction of the Commission was hotly contested.³

The only other tangible product of the Working Committee's efforts

¹ U. N. Document S/C.3/SC.2/4, May 21, 1947, in ibid., pp. 84-85.

² U. N. Document S/387, June 18, 1947, in ibid., p. 89.

³ "Resolution of the Commission for Conventional Armaments: Definition of Armaments, August 12, 1948," U. N. Document S/C.3/30, August 13, 1948, in ibid., p. 176.

was a general statement on principles for the regulation of armaments that was endorsed on August 12, 1948, by the ten non-communist states and rejected by the Soviet Union and the Ukraine. The resolution, with the strong backing of the United States, took the position that:

A system of regulation and reduction of armaments and armed forces can only be put into effect in an atmosphere of international confidence and security.¹

Three specific examples of conditions essential to such confidence were cited: the establishment of a United Nations military force under Article 43 of the Charter; the establishment of international control of atomic energy; and the conclusion of peace settlements with Germany and Japan. Unlike the Baruch Plan which was not linked with political settlement as a prerequisite, the Western powers set up stringent conditions to be met before engaging in detailed negotiations on conventional disarmament. Indeed, not a single definite proposal for arms reduction was brought forth by the West during this period, and the Soviet Union came up with only one.

Encountering a hostile majority in the CCA, the Soviets took their proposal directly to the General Assembly. On September 25, 1948, a draft resolution was introduced, recommending a one-third reduction in the land, naval, and air forces of the United States, the United Kingdom and the Soviet Union, France, and China within one year's time, coupled with an unconditional prohibition of nuclear weapons. An international control body "within the framework of the Security Council" was also

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U. N. Document S/C.3/31, August 15, 1948, in ibid., pp. 174-175.

recommended to supervise the implementation of these measures.¹ A reduction of one-third proportionately would have strengthened the relative power position of Russia since any cut in the already dangerously low conventional force levels in the Western countries would have produced dire consequences. At any rate, the failure to agree on a system of verification and disclosure made fractional reductions meaningless. Finally, agreement on lowering the level of conventional forces was tied to an acceptance of a ban on atomic weapons, which was unthinkable in the Western nations since nuclear armaments at an early date became the mainstay of their security.

The General Assembly in a 6-39-6 vote on November 17, 1948, rejected the Soviet proposal and adopted instead a modified French draft resolution asserting that conventional disarmament "can be attained only in an atmosphere of real and lasting improvement in international relations."² The resolution went on to note that mutual confidence would be enhanced if states exchanged "precise and verified data as to the level of their respective conventional arms and armed forces." Accordingly, it implored the Commission for Conventional Armaments to

. . . devote its first attention to formulating proposals for the receipt, checking and publication, by an international organ of control within the framework of the

1

U. N. Document S/C.3/30, August 13, 1948, in ibid., pp. 176-177. It was a revised version with the same provisions that was actually voted on: U. N. Document A/723, November 17, 1948, in ibid., pp. 187-188.

2

General Assembly Resolution 192 (III), November 19, 1948, in ibid., p. 189.

Security Council, of full information to be supplied by Member States with regard to their effectives and their conventional armaments.¹

On February 15, 1949, this resolution was referred to the CCA where it was considered by the Working Committee in five meetings from May 23 to July 19, 1949. The discussion centered around working papers on "The Collection and Verification of Information on the Armaments and Armed Forces of United Nations Members" presented by the French representative on May 26 and July 12.²

The Soviet Union brushed aside the papers on the grounds that they did not provide for any arms reductions and that the proposed arms census was limited exclusively to conventional armaments and armed forces. The French proposals were significant, however, in that they were the first attempt during the postwar negotiations to sketch out concretely a system of safeguards for arms control measures based exclusively on inspection. As we shall see later, the features of these proposals strongly influenced the conceptualization of plans for more elaborate inspection and control arrangements during the decade ahead.

The CCA on August 1, 1949, adopted the French working papers by a vote of 3-1 (the Soviet Union, the Ukraine, and Egypt opposing) and transmitted them to the Security Council where they were considered on October 11. The Soviet Union vetoed a French draft resolution endorsing the contents of the above-mentioned working papers whereupon a procedural

¹ Ibid.

² U. N. Document S/1372, August 9, 1949, in ibid., pp. 200-27.

resolution was passed, transferring the Commission's proposals to the General Assembly.¹ There the West won another empty parliamentary victory when on December 5 the General Assembly in a lopsided vote (44-5-5), placed its stamp of approval on the French plan for an international census and verification of conventional armaments and armed forces.² The resolution also requested the Commission for Conventional Armaments to continue its study.

At the twentieth meeting of the Commission, which was convened on April 27, 1950, to consider the General Assembly's December resolution, the Russian representative walked out and never returned after his move to unseat the Nationalist Chinese representative failed. The Working Committee met several times after that, and despite the absence of the Russians, the American representative went ahead and introduced four working papers, the contents of which will be discussed more fully in Chapter VI. The first dealt with the essential principles of a system of effective safeguards.³ The second presented a skeletal framework for a proposed Conventional Armaments Administration to administer international agreements on the regulation and reduction of conventional arms

¹U. N. Documents S/1399, October 11, 1949, and S/1403, October 11, 1949, in ibid., p. 208.

²General Assembly Resolution 300 (IV), December 5, 1949, in ibid., pp. 230-231.

³"United States Paper Submitted to the Working Committee of the Commission for Conventional Armaments: General Views on Item 3 ("Safe-guards") of Plan of Work Adopted by the Commission, May 18, 1950," U. N. Document S/C.3/SC.3/23, May 18, 1950, in ibid., pp. 233-235.

and armed forces.¹ The third detailed the kinds of military information to be reported in connection with an arms census.² The fourth suggested industrial information as one possible means of verifying compliance with an arms control agreement.³

Thus the work of the Commission for Conventional Armaments ended before it ever really began.

Phase II: The Disarmament Commission

No further formal negotiations occurred during the next two years in a period when American-Soviet relations deteriorated to their lowest point since the Cold War began. The invasion of South Korea by North Korean forces on June 25, 1950, touched off American and, later, United Nations and Communist Chinese intervention and killed any chance of reviving the two faltering U.N. arms control bodies. In the meantime, the United States had embarked on a crash rearmament program. On January 31, 1950, President Truman ordered the continuation of work on the development of the hydrogen bomb, resulting in the successful testing of the new

¹"United States Paper Submitted to the Working Committee of the Commission for Conventional Armaments; Proposed Conventional Armaments Administration, June 22, 1950," U. N. Document S/C.3/SC.3/24, June 22, 1960, in *ibid.*, pp. 235-239.

²"United States Paper Submitted to the Working Committee of the Commission for Conventional Armaments: General Views on the Nature and Scope of 'Military Safeguards'--Information on the Military and Para-Military Establishments To Be Reported, Inspected, and Verified, July 13, 1950," U. N. Document S/C.3/SC.3/25, July 13, 1950, in *ibid.*, pp. 240-247.

³"United States Paper Submitted to the Working Committee of the Commission for Conventional Armaments: General Views on the Nature and Scope of 'Industrial Safeguards'--Safeguards Through Industrial Information," U. N. Document S/C.3/SC.3/26, July 13, 1950, in *ibid.*, pp. 247-248.

superweapon in November, 1952.¹ Less than ten months later, it was revealed that the Soviet Union, too, had tested a hydrogen device.² Meanwhile, on October 3, 1952, the United Kingdom became the third full-fledged atomic power by testing its own atomic bomb.

Even though East-West disarmament negotiators did not meet during this period, both sides continued to talk about disarmament. In 1950 the Russians capitalized on world-wide fears of nuclear war and fostered the "Stockholm Appeal," a widely circulated petition which demanded an absolute ban on nuclear weapons.³ And on October 24, 1950--at the height of the Korean War--President Truman made an important address before the General Assembly redefining the basic principles of United States disarmament policy and ushering in the era of the comprehensive approach to disarmament.⁴

Three fundamental principles for a successful plan of disarmament were laid down by President Truman. (1) All kinds of weapons must be included, leading the President to recommend the consolidation of the Atomic Energy Commission and the Commission for Conventional Armaments, a major tactical concession to the Russians. (2) It must be based on

¹"Statement by President Truman Regarding Research on the Hydrogen Bomb, January 31, 1950," in ibid., p. 232.

²The Russian Government announcement was made on August 20, 1953. The actual date of the successful test explosion, according to the U. S. Atomic Energy Commission, was August 12, 1953. (New York Times, August 20, 1953, p. 5.)

³"Stockholm Appeal of the World Peace Council, March 19, 1950," in Documents on Disarmament, 1945-1959, I, 232.

⁴"Address by President Truman to the General Assembly [Extract], October 24, 1950," in ibid., pp. 257-259.

unanimous agreement, prompting the United States to refrain henceforth from pushing the passage of sterile General Assembly disarmament resolutions over Soviet opposition. (3) Finally, the plan must be foolproof, with safeguards "adequate to give immediate warning of any threatened violation." This signalled a shift of emphasis from the supranational controls envisaged by the Baruch Plan to a system of verification designed solely to provide a reliable warning of violations of a disarmament agreement.¹

Subsequently, the General Assembly on December 13, 1950, appointed a Committee of Twelve (the members of the Security Council and Canada) to consider the advisability of merging the two existing commissions on disarmament as President Truman had suggested.² The Committee on October 23, 1951, recommended that a single commission be set up under the Security Council but said nothing about its terms of reference.³ The Soviet Union stubbornly resisted this recommendation, thus reversing the position it had clung to tenaciously since 1946.

Despite Soviet opposition, the General Assembly nevertheless approved a resolution on January 11, 1952, establishing a Disarmament Commission made up of members of the Security Council and Canada when Canada is not a member of the Council.⁴ The resolution also incorporated the

¹Ibid., p. 258.

²General Assembly Resolution 496 (V), December 13, 1950, in ibid., pp. 269-270.

³Resolution of the Committee of Twelve, August 29, 1951, U. N. Document A/AC.50/6, August 29, 1951, in ibid., pp. 273-274.

⁴General Assembly Resolution 502 (VI), January 11, 1952, in ibid., pp. 337-339. The vote was 42-5-7, with only the Soviet bloc opposing.

terms of reference for the Disarmament Commission urged in a joint American-British-French draft resolution on November 19, 1951.¹ It proclaimed that:

Unless a better or no less effective system is devised, the United Nations plan for the international control of atomic energy and the prohibition of atomic weapons should continue to serve as the basis for the international control of atomic energy to ensure the prohibition of atomic weapons. . . .²

Furthermore, the Disarmament Commission was directed to prepare proposed measures for "the regulation, limitation, and balanced reduction of all armed forces and armaments" and to consider plans for the "progressive disclosure and verification on a continuing basis of all armed forces."³ The concept of phasing was thus introduced as a new dimension in the disarmament negotiations.

From February 4 to October 9, 1952, the Disarmament Commission held thirty meetings.⁴ The first eight sessions debated nothing but the program of work to be followed by the Commission, thus recapitulating the history of the earlier Commission for Conventional Armaments.

What was ostensibly a procedural work plan submitted by the Soviet delegate would have committed the Disarmament Commission to the time-worn

¹U. N. Document A/C .1/667, November 19, 1951, in ibid., pp. 307-309.

²Ibid., p. 338.

³Ibid.

⁴The best official account of the negotiations during 1952 is the report made by the American representative to the President: U. S., Department of State, United States Efforts toward Disarmament, Department of State Publication No. 4902 (Washington: U. S. Government Printing Office, 1953).

proposals presented to and rejected by the United Nations every year since 1948: the prohibition of atomic weapons, with "strict international control" to come into effect along with prohibition; a one-third reduction in all other armaments and armed forces by the five major powers within one year; the furnishing by all countries of full official information on the state of all their armaments and armed forces; and the establishment under the jurisdiction of the Security Council of a control organ with the authority "to carry out inspection on a continuing basis, [but] without the right to interfere in the domestic affairs of States."¹ One new item was included in these proposals--a request for the investigation of violations of the prohibition of bacterial warfare, which referred to Soviet charges that the United States was waging germ warfare in North Korea and Communist China.

In the end, the Commission majority overruled the Russian insistence that their proposals should serve as the basis for discussion and decided that three areas of inquiry would be pursued: the disclosure and verification of armaments; the elimination of atomic weapons and other weapons of mass destruction and the limitation and regulation of others; and the development of a procedure and timetable for putting the disarmament program into effect.² The Commission then divided its work between two committees: one to consider the regulation of armaments and armed forces

¹"Soviet Draft Plan of Work Introduced in the Disarmament Commission, March 19, 1952," U. N. Document DC/4/Rev. 1, March 19, 1952, in Documents on Disarmament, 1945-1959, I, 344-345.

²"Disarmament Commission Plan of Work, March 23, 1952," U. N. Document DC/6, March 23, 1952, in ibid., pp. 345-346. The vote was 11-1 (the Soviet Union opposing) .

and one to study the problem of disclosure and verification.

The subsequent meetings of the Commission and its committees were devoted to a discussion of three substantive proposals advanced by the Western powers. No attempt was made in these exploratory talks to reach any definite decisions by taking votes in view of the extreme recalcitrance displayed by the Soviet representative. On April 5 a working paper on "Proposals for Progressive and Continuing Verification of All Armed Forces and Armaments" was presented to the Commission by Benjamin V. Cohen, the American representative on the Commission.¹ This proposal provided for continuing disclosure and verification (as opposed to the "one-time" armaments census suggested by the French plan of 1949). All armed forces of every kind, including para-military, security, and police forces, and all armaments were to be included. It was hoped that this provision would meet the Russian objection voiced against earlier proposals for verification and disclosure which pertained to conventional armaments and armed forces only. Disclosure and verification would begin with less secretive areas and proceed through five separate stages toward more sensitive areas of national defenses. On-the-spot inspection, aerial surveys, and access to statistical data were deemed necessary in order to verify the authenticity and adequacy of disclosures made by governments.

The second proposal, submitted by the United States on April 24, was concerned with "Essential Principles for a Disarmament Program."²

¹ U.N. Document DC/C.2/1, April 5, 1952, in ibid., pp. 346-356.

² U. N. Document DC/C.1/1, April 24, 1952, in ibid., pp. 357-358.

The goal of disarmament was defined as the establishment of "an open and substantially disarmed world" in which war is prevented, not regulated.

The third proposal, laid before the Commission on May 28 and jointly sponsored by America, Britain, and France, was entitled "Proposals for Fixing Numerical Limitation on All Armed Forces."¹ It represented the first concrete proposal by the Western allies for the limitation and reduction of conventional armed forces since 1945 and figured prominently in later disarmament discussions. Equal maximum ceilings of between 1 million and 1.5 million were suggested for the armed forces of the United States, the Soviet Union, and China, and equal maximum ceilings of between 700,000 and 800,000 for France and the United Kingdom. It was also suggested that there should be agreed maximum ceilings for all other states having substantial armed forces, to be fixed in relation to the ceilings agreed upon for the five major powers.

The Soviet Union evidenced no interest in the tripartite proposal and as rigidly as ever continued to insist on a straight one-third cut in conventional forces. Rejecting all three of the working papers as a basis for discussion, the Soviet representative, Jacob Malik, sought to use the Commission's meetings as a propaganda forum to publicize Soviet charges that the United States was engaging in bacteriological warfare in the Korea and China.

¹ U. N. Document DC/10, May 28, 1952, in ibid., pp. 365-369. A further paper elaborating the criteria and procedures for working out ceilings on armed forces and armaments was presented on August 12. U. N. Document DC/12, August 12, 1952, in ibid., pp. 370-372.

It was obvious that no headway was being made by the Disarmament Commission. Its first report to the Security Council on May 28, 1952, noted simply that the discussions were continuing, and the second report submitted on October 9, 1952, consisted only of a summary of the unproductive debates.¹ At this point the negotiations broke down completely again.

Until April 9, 1954, when it was revived temporarily, the Disarmament Commission met only once--on August 20, 1953--to adopt its third report which stated simply that the Commission hoped that "recent international events will create a more propitious atmosphere for the resumption of our work."²

The pattern of events during 1953 did, indeed, rekindle the disarmament movement. The death of Stalin on March 3, 1953, was followed by a period of greater flexibility in Russian policies on many key issues. The signing of the Korean Armistice on July 27, 1953, also removed another roadblock to renewing the negotiations.

One early indication of the "new look" in Soviet policy came during the consideration of the Disarmament Commission's third report by the General Assembly in November, 1953. In this connection, the Assembly passed by a 54-0-5 vote a resolution suggesting that the Disarmament Commission consider establishing a subcommittee "of the Powers principally

¹U. N., Disarmament Commission, Official Records: Special Supplement No. 1, Second Report of the Disarmament Commission, U. N. Document DC/20, October 9, 1953.

²U. N. Document DC/32, August 20, 1953, in Documents on Disarmament, 1945-1959, I, 333.

France, the Soviet Union, the United Kingdom, and the United States. The Soviet Union requested that Communist China, Czechoslovakia, and India also be included. But on April 19 the Commission decided to set up a Subcommittee of Five along the lines favored by the West.¹

After an organizational meeting in New York on April 23, 1954, the Subcommittee commenced its work in London on May 13 in what was the first substantive arms control negotiations since August, 1952, when the Disarmament Commission had ceased to function.

In retrospect, controlled atomic disarmament was technically attainable during the first two phases of the postwar negotiations. Yet an agreement compatible with American and Soviet national interests was impossible, even if it had been desired, because their military capabilities were so dissimilar. Since American military strength was based primarily on atomic weapons while the Soviet Union relied on conventional forces, any particular arms control measure would have resulted in greatly unequal advantages. Paradoxically, in Phase III of the negotiations the political climate for disarmament improved noticeably, but at the same time it became progressively less feasible technically. This development will be considered in Chapter IV.

¹ U. N. Document DC/49, April 19, 1954, in *ibid.*, p. 413. The vote was 9-1-2 (Russia opposing, China and Lebanon abstaining).

CHAPTER IV

THE RECORD OF THE NEGOTIATIONS, 1954-1957

The rigidity and one-sidedness of both Western and Soviet positions on disarmament up to 1954 obviously ruled out the possibility of any international agreement. The Soviet Union devoted practically all of its attention to the programmatic aspect of disarmament--in particular, the abolition of nuclear weapons and a one-third cut in troops and conventional arms. On the other hand, American, British, Canadian, and French leaders focused their efforts on achieving an administrative system of safeguards and controls within which disarmament could take place, but without any definite assurance that it actually would.

In the period from 1950 to 1955, however, the policies of both sides underwent important changes. First the American and then the Russian approach became more resilient, enabling serious negotiations to take place. As a result, the gap separating their policies on disarmament reached its narrowest point during the discussions of the Subcommittee of Five from 1954 through 1957.

Phase III: The Subcommittee of Five (1954-1957)

The First Session of the Subcommittee, May 13-June 22, 1954

In the eighteen secret meetings of the Subcommittee in London during May and June, 1954, no progress was made in resolving Western and Soviet differences.¹ On the contrary, the United States representa-

¹ See Great Britain, House of Commons, Verbatim Records of the

tive, Morehead Patterson, reported that:

The Soviet Union took more rigid positions than ever before, making it completely clear--where formerly there might have been doubt--that it will not permit a control organ to have any authority to deal with clandestine violations of a disarmament program.¹

The Subcommittee received proposals from the Soviet Union on May 14, June 1, and June 11, all of them having practically the same substantive content.² They revealed no shifts away from the policies of the Stalin regime, continuing instead to call for

(1) states to "assume a solemn and unconditional obligation not to employ atomic, hydrogen, or other weapons of mass destruction" as an important step toward achieving the elimination of this class of armaments;

(2) the abolition of military bases on foreign territories;³

Meetings of the Sub-Committee of the United Nations Disarmament Commission Held at Lancaster House, London, May 13-June 22, 1954, Cmd. 9205 (London: Her Majesty's Stationery Office, 1954).

¹U. S., Department of State, The Record on Disarmament: Report of U. S. Deputy Representative to Disarmament Commission on London Meeting of Subcommittee of Five and on Disarmament Commission Meetings, July 1954, Department of State Publication No. 5581 (Washington: U. S. Government Printing Office, 1954), p. 19.

²U. N. Document DC/SC.1/1, May 14, 1954, in U. N., Disarmament Commission, Official Records: Supplement for April, May and June 1954, p. 7; U. N. Document DC/SC.1/9, June 11, 1954, in ibid., pp. 19-21.

³This proposal initially was made in a draft resolution in the General Assembly on September 24, 1953. (U. N. Document A/2485/Rev. 1, September 24, 1953, in Documents on Disarmament, 1945-1959, I, 390-391.)

(3) an overall limit and reduction of the armed forces of the five major powers within the course of one year;

(4) the convening of a general world disarmament conference;

(5) the establishment of effective international control simultaneously with the prohibition of mass destruction weapons and other types of armed forces, to be exercised by a control organ set up under the Security Council to carry out "inspection on a continuing basis" without the right to interfere in the domestic affairs of states.¹

Insisting that the Western representatives were proceeding illogically, "proposing to discuss the control organ in detail while refusing to decide for that purpose as to what is being set up, Jacob Malik, the Soviet delegate, refused to consider the substance of any plans other than the ones he presented.² Despite the negative attitude of the Soviet negotiator, the Western proposals of far-reaching importance were introduced and explained. First, the United States, as a supplement to its proposal of June, 1946, tabled a working paper describing the structure, authority, and functions of the international control organ for a comprehensive disarmament treaty. Proposed under that

¹U. N. Disarmament Commission, Official Records: Second Disarmament Session for April, May and June 1946, p. 10.

²U. N. Department of Public Information, Yearbook of the United Nations, 1946, p. 11.

³United States Working Paper Submitted to the Disarmament Sub-Committee: Methods of Implementing and Enforcing Disarmament Program - The Establishment of International Control Organs with Appropriate Rights, Powers, and Functions, May 2, 1946, U. N. Document DC, SG.1.1, in Documents on Disarmament, 1945-1946, I, 414-422.

plan was the establishment of a United Nations Disarmament and Atomic Development Authority composed of the members of the Security Council and Canada and organized into two branches, one for executing agreements limiting conventional forces and one for the control and development of atomic energy.

Significantly, the United States proposal abandoned--without openly disavowing--the two key features of the Baruch Plan. In the first place, no longer was international ownership or management considered to be an indispensable feature of an acceptable plan for controlling atomic energy. Under the present proposal, the control organ would be empowered only "to the extent necessary to ensure effective prohibition of nuclear weapons and use of nuclear materials for peaceful purposes only."¹ In the second place, it dropped the requirement that the veto be disallowed in the Security Council on matters concerning the punishment of violations of an atomic-energy control treaty. Under the modified plan, the control authority would be empowered to take direct action against minor violations by requesting states to remedy illegal acts; by suspending the supply of nuclear materials to an offending state; and by closing down the nuclear facilities of a state violating the provisions of the treaty. Major violations, however, would be reported to the General Assembly and the Security Council "in order to permit appropriate action by the United Nations or by individual states. . . ."² Thus the switch in American policy from the ownership of atomic material to disclosure and verification through international inspection as the

¹Ibid., p. 418.

²Ibid., p. 420.

primary means of safeguarding a disarmament agreement was made official.

A second Western proposal was introduced on June 11, 1954, when the United Kingdom and France offered a new comprehensive plan for disarmament that was "every bit as important as the proposals contained in the Baruch Plan."¹ In an attempt to reconcile the conflicting priorities set up by the United States and the Soviet Union regarding the sequence of steps to be taken, the Anglo-French Memorandum suggested that disarmament and control should be synchronized and put into effect conjointly. At any given time, all of the disarmament that could safely be controlled would be implemented, thus, it was hoped, avoiding the dichotomy of "either control or disarmament."

Specifically, the Anglo-French Plan divided into three stages the implementation of a treaty providing for the elimination of weapons of mass destruction and major reductions of all armed forces and conventional armaments. Immediately upon the entry of the treaty into force, states would obligate themselves not to use nuclear weapons except in defense against aggression. Then in the first stage, commencing as soon as the control organ was set up to handle the operation, a "freeze" on military establishments (manpower and budgets) at their December, 1953, levels would be put into effect. In the second stage, beginning when the control organ reported that it had effectively enforced the "freeze" on troops and military expenditures and that it was able to supervise the

¹Nutting, p. 11. For the text of the Anglo-French Memorandum, see U. N. Document DC/SC.1/10, June 11, 1954, in Documents on Disarmament, 1945-1959, I, 423-424.

next stage, one-half of the agreed reductions of conventional armaments and armed forces would be carried out. Upon the completion of this operation, any further production of nuclear and other prohibited weapons would cease. Finally, in stage three, after the control organ certified that it could effectively enforce them, the second half of the reductions of military personnel and armaments would take effect. As soon as armed forces and armaments were lowered to the agreed ceilings, the total prohibition of nuclear weapons and the conversion of nuclear materials to peaceful uses would be effectuated. The assumption implied here, later proven to be invalid, was that it was technically possible to devise adequate controls for such a ban.

Although the Soviet Union later reacted favorably toward the concept of phased disarmament, it was evident that the Russian representative was unprepared to engage in substantive discussions. So the Subcommittee decided to adjourn on June 22 and to submit a report of its meetings, without any recommendations, to the Disarmament Commission.¹ The Commission from July 20 to July 29 discussed the report in a series of eight meetings before deciding to transmit to the General Assembly the various proposals that had been made.²

Over the next few weeks of relative silence in the disarmament field, Russian policy, we know now, was being re-examined and overhauled.

¹"A Report of the Sub-Committee of the Disarmament Commission, June 22, 1954," U. N. Document DC/53, in U. N., Disarmament Commission, Official Records: Supplement for April, May and June 1954, pp. 6-22.

²U. N., Disarmament Commission, Official Records: 43rd Meeting, July 29, 1954, pp. 1-3.

When the ninth session of the General Assembly convened on September 30, 1954, Andrei Vyshinsky dropped a bombshell by presenting a draft resolution requesting the Security Council to prepare a draft disarmament treaty on the basis of the Anglo-French Memorandum of June 11, 1954.¹ This move unquestionably marked the most important shift in the Soviet position since 1946. But a closer examination reveals that the change was not so dramatic or thoroughgoing as it seemed at first glance. For one thing, the draft resolution specified that the Anglo-French proposal to prohibit the use of nuclear weapons except in defense against aggression should be referred back to the Disarmament Commission for study and clarification. It also placed definite time limits (six months or a year) on the movement from one stage to the other rather than leaving the matter to the discretion of the control organ as contemplated by the Anglo-French Plan. Furthermore, it directed that the prohibition of nuclear weapons should be carried out simultaneously with the second half of the agreed reductions in troops and non-atomic armaments instead of waiting until they were completed. Finally, although the Soviet Union left off the qualifications that had been previously attached to an acceptance of inspection, it still insisted, as the debate on the proposal showed, that the control agency would be under the jurisdiction Security Council, and thus subject to the veto.²

¹"Soviet Draft Resolution Introduced in the General Assembly: Conclusion of an International Convention (Treaty) on the Reduction of Armaments and the Prohibition of Atomic, Hydrogen, and Other Weapons of Mass Destruction, September 30, 1954," U. N. Document A/2742 and Corr. 1, in Documents on Disarmament, 1945-1959, I, 431-433.

²The draft resolution stated: "This control organ shall have

Notwithstanding these fundamental differences, the modifications introduced into both Western and Soviet disarmament policies paved the way for a new cycle of conferences. Accordingly, the Soviet Union on November 4, 1954, joined with the United States, the United Kingdom, France, and Canada in co-sponsoring a draft resolution in the General Assembly urging further efforts to reach an agreement on a comprehensive and coordinated disarmament plan and suggesting to the Disarmament Commission that the Subcommittee of Five be reconvened to seek an acceptable solution.¹ The Disarmament Commission, complying with the Assembly's recommendation, on November 19 agreed that the Subcommittee should resume its work.

The Second Session of the Subcommittee,
February 25-May 18, 1955

The second series of secret discussions by the Subcommittee, held also at London, covered a total of twenty-eight meetings and witnessed the dramatic presentation of the Russian plan of May 10 that incorporated most of the proposals developed by the Western powers after 1952.²

full powers of supervision, including the power of inspection on a continuing basis to the extent necessary to ensure implementation of the convention by all States." Ibid., p. 432.

¹General Assembly Resolution 808 (IX), November 4, 1954, in ibid., pp. 444-446. Significantly, this was the first General Assembly disarmament resolution since December 14, 1946, actively supported by both the Soviet bloc and the Western nations.

²See Great Britain, House of Commons, Verbatim Records of the Meetings of the Second Session of the Sub-Committee of the United Nations Disarmament Commission Held at Lancaster House, London, February 25-May 18, 1955, Cmd. 9648-9650 (London: Her Majesty's Stationery Office, 1956).

In all, three major Russian proposals were advanced at the Subcommittee's second session. The Soviet representative, Andrei Gromyko (who was replaced by Jacob Malik on March 25), at the first meeting tabled a draft resolution calling for a freeze on armaments and armed forces at their January, 1955, levels and for the elimination of atomic and hydrogen weapons under international control.¹ He insisted that this proposal should be agreed upon immediately, prior to any discussion of the Anglo-French Plan.² Thus the Soviet Union had reverted back to its rigid pre-1954 policy positions.

The Western representatives responded on March 8, 1955, with a quadripartite draft resolution laying down the provisions of the Anglo-French Memorandum of June, 1954, as the only suitable framework for a disarmament treaty. Whereas the United States had merely endorsed the original 1954 proposal by Britain and France, it actively sponsored the March 8, 1955, version. This, in effect, reaffirmed the commitment of American disarmament policy to a prohibition of nuclear weapons at a time when such an action had become technically unfeasible because it could not be verified effectively.

Confronted with Western refusal to discuss his proposal on February 25, except within the framework of the Anglo-French Plan, Gromyko on March 18 then came forward with a second draft proposal which was similar to the one that Vyshinsky had placed before the General Assembly during

¹U. N. Document DC/SC.1/12/Rev. 1, February 25, 1955, in Documents on Disarmament, 1945-1959, I, 447.

²U. N., Disarmament Commission, Official Records: Supplement for April to December 1955, annex 3, pp. 4-5.

September, 1954.¹ From then until the end of April three aspects of a comprehensive disarmament treaty were taken up without erasing any East-West differences. On the question of force levels, the Russians continued to insist that reductions be made on the basis of a flat percentage of existing strengths. The Western Four held to a position favoring specific ceilings.² On the question of timing the implementation of a disarmament treaty, the Soviet Union still required fixed time limits for each phase of arms reductions so that at a certain point nuclear weapons would be eliminated automatically. The West wanted a flexible arrangement in which at each stage the control agency must ascertain that it could effectively supervise the measures before they would be implemented. To make the Western policy on phasing more palatable to the Russians, the British and French on April 19 offered to advance the prohibition of nuclear weapons from the end of the agreed reductions in conventional forces to the time when these reductions were three-fourths completed.³

¹U. N. Document DC/SC.1/19/Rev. 1, March 18, 1955, in ibid., annex 8, pp. 11-13. It did, however, contain an additional statement amplifying Soviet policy on the authority and makeup of the control organ: ". . . the international control organ shall have its own permanent staff of inspectors, having unrestricted access, within the limits of the supervisory functions which they exercise, to all establishments subject to control." Ibid., pp. 12-13.

²On March 12, a quadripartite declaration of principles for calculating conventional force reductions, similar to the tripartite proposal of May 28, 1952, was handed to the Subcommittee. Ibid., annex 6, pp. 7-8. Also, an Anglo-French Memorandum was circulated on March 29, proposing armed force ceilings of 650,000 for Britain and France and 1-1.5 million for America, China, and Russia. Ibid., annex 9, p. 13.

³"Anglo-French Memorandum Submitted to the Disarmament Subcommittee: Prohibition and Elimination of Nuclear Weapons, April 19, 1955," U. N. Document DC/SC.1/24 in Documents on Disarmament, 1945-1959, I, 456-467.

On the question of control, the Russian representative indicated that his government would not permit on-the-spot inspection during the "freeze" stage of the proposed treaty. Moreover, he was antipathetic toward the Western working paper of April 21 which advocated giving the control organ wide latitude in supervising the implementation of the disarmament program.¹ Otherwise, the Soviet delegation refused to explain concretely what kind of control system was envisaged by the plans they presented.

The third Soviet proposal, tabled on May 10 without any advance build-up, once again reversed the zig-zag line of Russian policy.² The omnibus proposal, drawn in the form of a draft resolution to be acted upon by the General Assembly and the Security Council, covered three interconnected areas: political settlement, a disarmament program, and a control system.

Politically, the proposal called for the withdrawal of all foreign troops from German territory, the settlement of Far Eastern questions "in accordance with the principles of sovereignty and territorial integrity," an end to the Cold War, and the removal of obstacles to international trade. Prior to that time, Russian disarmament proposals had disregarded the conditions of the wider political environment. Now they seemed to recognize the dependence of disarmament on political settle-

¹ U. N., Disarmament Commission, Official Records: Supplement for April to December 1945, annex 14, pp. 15-17.

² "Reduction of Armaments, the Prohibition of Atomic Weapons, and the Elimination of the Threat of a New War," U. N. Document DC/SC.1/26/Rev. 2, May 10, 1950, in Documents on Disarmament, 1945-1959, I, 456-457.

ment, thus bringing closer together the Western and Soviet views on the nature of the problem of disarmament.

Regarding specific disarmament measures, a two-stage plan incorporating the main features of the Western proposal of March 8, 1955, was advanced:

1. Within two months after the ratification of the agreement, the participating states would "freeze" the level of their armed forces, conventional armaments, and military expenditures at their December, 1954, levels.

2. Then within one year, one-half of the reductions necessary to bring the forces of the five major powers down to the following level would be effected: 1 to 1.5 million men for America, Russia, and China; and 650,000 for Britain and France. During that period, hydrogen and atomic weapons testing would be discontinued; the use of nuclear weapons would be prohibited "except for the purposes of defense, when a decision to that effect is taken by the Security Council"; and a world conference would be called to set the reductions of arms and armed forces of other states.

3. The second stage would be carried out during the next year. The last half of the prescribed reductions of military personnel and weapons would be executed. Upon the completion of 75 per cent of these reductions an unconditional prohibition of nuclear and other weapons of mass destruction would take effect, the production of these weapons having already ceased at the beginning of stage two. During that period, the liquidation of all foreign military, naval, and air bases, started

in the first stage, would be completed.¹

Paradoxically, after describing a program aimed at the elimination of nuclear weapons, the third part of the draft resolution dealing with control conceded candidly that:

It is well known that the production of atomic energy for peaceful purposes can be used for the accumulation of stocks of explosive atomic materials, and moreover, in ever greater quantities. This means that States having establishments for the production of atomic energy can accumulate, in violation of relevant agreements, large quantities of explosive materials for the production of atomic weapons.

Thus, there are possibilities beyond the reach of international control for evading this control and for organizing the clandestine manufacture of atomic and hydrogen weapons, even if there is a formal agreement on international control. In such a situation, the security of the States parties to the international convention (treaty) cannot be guaranteed, since the possibility would be open to a potential aggressor to accumulate stocks of atomic and hydrogen weapons for a surprise attack on peace-loving states.²

Because of the technical ineffectiveness of controls over national atomic-energy establishments, the creation of an atmosphere of mutual trust should be the objective of control measures in the first stage, according to the Soviet declaration. Consequently, the main responsibility of an inspection system initially would be to reduce international tension by lessening the danger of surprise attack. Reasoning from the premise that the launching of a large-scale attack--atomic or non-atomic--necessitates the movement and concentration of large conventional forces, the Soviet proposal suggested the establishment, "on a

¹Ibid., pp. 461-464.

²Ibid., p. 465.

basis of reciprocity, [of] control posts at large ports, at railway junctions, on main motor highways and at aerodromes."¹ The function of these posts would be "to see to it that there is no dangerous concentration of land, air or naval forces," thus deterring a sneak attack.²

It was assumed that the fulfillment of the above confidence-building measures would create the necessary climate of mutual trust so that states, in the second stage, would be willing to grant the control organ the right (1) "to exercise control, including inspection on a continuing basis, to the extent necessary to ensure the implementation of the above-mentioned convention by all States"; and (2) "to have permanently in all States parties to the convention its own staff of inspectors [recruited on an international basis] having, within the bounds of the control functions which they exercise, unimpeded access at all times to all objects of control."³ The control organ, however, could only make recommendations to the Security Council for measures to deal with violations of the terms of the agreement.

The new Russian plan, despite the remarkable concessions it offered, was still basically unsatisfactory from the Western point of view since it contained features, such as banning the use of nuclear weapons and the dismantling of foreign military bases, that were clearly unthinkable. Moreover, the Soviet commitment to international inspection continued to be vague because no indication was given as to how

¹Ibid., p. 466.

²Ibid.

³Ibid., p. 467.

broad or how narrow the "objects of control" would be defined. Yet in the May 10 proposal, the Soviet Government came very close to adopting the criteria laid down by the Western powers (under the initiative of France and Britain) for a comprehensive disarmament agreement. These criteria, however, were technically unsound although they were politically attractive. A safeguarded agreement eliminating nuclear weapons was simply no longer possible under available methods of control.

So long as the Soviet position remained statically inflexible, there was no urgency to revise the outmoded Western policy to take account of technological changes. But the Russian move on May 10, whether it was intended as a serious proposal or merely as a tactical maneuver to place the West on the defensive, had the effect of forcing the issue. The other four members of the Subcommittee, caught off guard by the Soviet challenge, were unable to continue the negotiations at that point. So despite the reluctance of the Soviet representative, the negotiations were recessed from May 13 until June 1 "to give the five Governments represented on the Sub-Committee an opportunity to consider the situation now reached and the progress made since the talks began on February 25."¹ But by June 1 the Geneva Conference of Heads of Government was imminent, so the Subcommittee decided to postpone any further discussions until after the summit meeting.

¹ U. N. Disarmament Commission, Official Records: Supplement for April to December 1955, p. 2.

The Geneva Conference of Heads of Government,
July 18-July 23, 1955

The Soviet initiative on disarmament came at an inauspicious time for the United States. Already, with the appointment on March 19, 1955, of Harold E. Stassen as Special Assistant to the President for Disarmament, the Eisenhower Administration had commenced a top-level reappraisal of basic American disarmament policies.¹ But before a new line of policy could be crystallized, the Soviet Union, in effect, seconded the outdated Western approach and began to press for the negotiation of a disarmament treaty based on it.

In a move to blunt the Soviet offensive, the three Western governments at the Geneva Conference from July 18 to July 23, 1955, sought to alter the direction of the negotiations of the Subcommittee by presenting a number of proposals for "confidence-building" partial measures and by playing down the comprehensive approach to disarmament.

President Eisenhower keyed the new emphasis in Western disarmament doctrine:

Surprise attack has a capacity for destruction beyond anything which man has yet known. So each of us deems it vital that there should be a means to deter such attack. Perhaps, therefore, we should consider whether the problem of limitation of armament may not best be approached by seeking--as a first step--dependable ways to supervise and inspect military establishments so that

¹U. S., Department of State, Disarmament: The Intensified Effort, 1955-1958, 2d ed. rev. Department of State Publication No. 7070 (Washington: U. S. Government Printing Office, 1960), pp. 8-10. (Hereafter cited as Disarmament: The Intensified Effort, 1955-1958.)

there can be no frightful surprises, whether by sudden attack or by secret violation of agreed restrictions.¹

Three specific plans for immediate action to realize this objective were put forward--one by each of the Western heads of government. Speaking for the Government of France, Premier Edgar Faure proposed a scheme whereby states would reduce their military expenditures by an agreed percentage (increasing progressively each year) and allocate a part or all of the capital thus made available to a fund for equipment and mutual aid in order to assist underdeveloped territories.² In lieu of physical inspection, control would be based on financial and budgetary information furnished by states to an international secretariat which would administer the arrangement. The somewhat dubious assumption here was that national budgets necessarily give an accurate picture of how governments actually allocate their financial resources. Presumably, however, the incentive to evade the agreement would be low because states would be contributing a larger and larger part of their military budgets to the international development fund. Thus to maintain large military forces in violation of the agreement would, at the same time, strain a state's economy unbearably.

¹U. S., Department of State, The Geneva Conference of Heads of Government, July 18-23, 1955, Department of State Publication No. 6046 (Washington: U. S. Government Printing Office, 1955), p. 21. (Cited hereafter as The Geneva Conference of Heads of Government.)

²"Statement by the French Premier (Faure) at the Geneva Conference of Heads of Government: Reduction of Military Expenditures [Extract], July 18, 1955," in Documents on Disarmament, 1945-1959, I, 475-478.

Prime Minister Eden recommended, as a means of reducing international tension and testing the efficacy of international inspection on a limited scale, the establishment of a joint system of inspection of East-West forces confronting each other in Europe. "In specified areas of agreed extent" in Eastern and Western Europe, joint inspection teams would operate by mutual consent.¹

The proposal attracting the widest attention was President Eisenhower's "open skies" plan which, although not planned that way originally, was destined to be the focal point of American policy for the next three years.² On July 21 the President, speaking directly to the Soviet statesmen, proposed as a practical step to be taken "immediately" that the two countries should

. . . give to each other a complete blueprint of our military establishments, from beginning to end, from one end of our countries to the other. . . .³

To verify compliance with the agreement, there would be provided

. . . within our countries facilities for aerial photography to the other country--we to provide you the facilities within our country, ample facilities for aerial reconnaissance, where you can make all the pictures you choose and take them to your country to study, you to provide exactly the same facilities for us. . . .⁴

¹"British Memorandum Submitted at the Geneva Conference of Heads of Government: Joint Inspection in Europe, July 21, 1955," in *ibid.*, pp. 488-489.

²The interesting story of the origin of the "open skies" plan is told in Robert J. Donovan, Eisenhower: The Inside Story (New York: Harper and Brothers, 1956), pp. 343-351.

³"Statement by President Eisenhower at the Geneva Conference of Heads of Government: Aerial Inspection and Exchange of Military Blueprints, July 21, 1955," in Documents on Disarmament, 1945-1959, I, 487.

⁴*Ibid.*, pp. 487-488.

Premier Bulganin on July 21 submitted what was essentially the same proposal that was handed to the Subcommittee of Five on May 10 except for three modifications.¹ First, no mention was made as to the length of each stage in the execution of a phased disarmament agreement, thus omitting the rigid one-year time limit decreed by the original proposal. Second, in addition to the ceilings previously proposed for the five major powers, the Bulganin plan stipulated that the armed forces of all other states should not exceed 150,000 to 200,000 men, a provision undoubtedly aimed at forestalling the rearmament of West Germany up to the allotted 500,000-man strength. Third, prior to the conclusion of a disarmament treaty, Bulganin wanted the four nations represented at Geneva to pledge themselves "not to be the first one to use atomic or hydrogen weapons against any country."²

In vain the Soviet delegation tried to draw the Western statesmen into a detailed discussion of the Soviet plan for comprehensive disarmament. They carefully refrained, however, from taking a stand--affirmatively or negatively--with regard to the Bulganin proposals. On July 23, at the end of six days of exploratory consultations, a directive was issued proposing the resumption of the meetings of the Subcommittee of

¹"Soviet Proposal at the Geneva Conference of Heads of Government: Decision on the Reduction of Armaments and the Prohibition of Atomic Weapons, July 21, 1955," in *ibid.*, pp. 404-405.

²*Ibid.*, p. 405. Compare this with the Western quadripartite draft resolution of March 3, 1955, under which states would have obligated themselves at the start of the disarmament process not to use nuclear weapons "except in defence against aggression." This permitted the employment of nuclear weapons against an attack launched with conventional forces. Documents on Disarmament, 1945-1959, I, 446.

Five on August 29, 1955, with instructions to take account "of the views and proposals advanced by the Heads of Government at this Conference."¹

The Third Session of the Subcommittee,
August 29-October 7, 1955

The Subcommittee reconvened in New York and continued its private discussions in eighteen further meetings during what the British representative, Anthony Nutting, has described as "an unhappy and uncomfortable five weeks' session."² Arkady Sobolev, arguing the Russian case, relentlessly prodded the other representatives to make a definite response to the Soviet proposal, introduced first on May 10 and then reaffirmed at Geneva on July 21. Three months had gone by, and so far none of the Western governments had declared whether they were willing to enter into detailed negotiations on a draft disarmament treaty based on the principles of the Soviet plan.

Failing to elicit an outright acceptance or rejection, Sobolev asked the other members of the Subcommittee point-blank whether they agreed to Soviet proposals for (1) a ceiling of 1 to 1.5 million men for the forces of the United States, the Soviet Union, and China, and 650,000 men for those of France and the United Kingdom; (2) a ceiling

¹The Geneva Conference of Heads of Government, p. 68.

²Nutting, pp. 20-21. See Great Britain, House of Commons, Verbatim Records of the Meetings of the Second Session of the Subcommittee of the United Nations Disarmament Commission Held at New York, June 1-October 7, 1955, Cmd. 9651-9652 (London: Her Majesty's Stationery Office, 1956). (Hereafter cited as Cmd. 9651 and Cmd. 9652.)

on the armed forces of other states not exceeding 150,000 to 200,000 men; (3) a prohibition of nuclear weapons upon the completion of 75 per cent of the prescribed reductions in conventional forces; (4) a ban on the use of nuclear weapons in the first phase of disarmament unless the Security Council allowed them to be used in defense against aggression; and (5) the discontinuance of nuclear-weapon testing as one of the first measures in the execution of the disarmament program.¹ Parts one and three, as we have seen, were originated by the Western powers, and parts two, four, and five were contrived by the Soviet Government.

The West now faced the alternative of either going ahead with a detailed consideration of these proposals or else disavowing them openly. Britain, France, and Canada chose to stand by their former positions while at the same time recalling that effective control was an indispensable condition in the Anglo-French Plan for the implementation of the agreed program of disarmament.² And since both the West and the Soviet Union openly acknowledged that the elimination of nuclear weapons could not be guaranteed by any known technique of inspection and control, the West could then "in good faith" refuse to conclude an agreement on a nuclear prohibition without unnecessarily damaging its negotiating posture.

Therefore, while playing down the programmatic aspect of disarmament where the Western position was the most vulnerable, Britain and

¹Cmd. 9651, 1956, pp. 721-722.

²Cmd. 9651, 1956, pp. 737-740, 750-752.

France pressed the Soviet Union hard on the part of its comprehensive proposals having to do with inspection and control. France on September 2 introduced two working papers concerning the structure and authority of an international disarmament organization.¹ The proposed scheme envisaged an organization consisting of a general assembly of all states ratifying the disarmament treaty; a fifteen-member permanent committee (the five permanent members of the Security Council and ten members elected periodically by the general assembly); a council of jurists composed of seven persons elected by the general assembly; and a control administration responsible to a director-general, also appointed by the general assembly. This arrangement purported to narrow the differences between American and Russian views on the procedures for administering a phased disarmament program. If the control administration reported that it was prepared to supervise the agreed reductions and the permanent committee concurred unanimously, they would be implemented according to a fixed time schedule set by the treaty. If not, a period of six months would elapse before any further action. Then, by unanimous agreement the control administration could proceed with the next step, or, failing that, the matter would be referred directly to the Security Council.

¹ "French Working Paper Submitted to the Disarmament Subcommittee: Proposals Concerning the Structure of the International Disarmament Organization, September 2, 1955," U. N. Document DC/SC.1/32, in Documents on Disarmament, 1945-1959, I, 503-506; "French Working Paper Submitted to the Disarmament Subcommittee: Proposals Concerning the Powers of the Control Administration, September 2, 1955," U. N. Document DC/SC.1/33, in ibid., pp. 506-509.

On September 13 the United Kingdom also presented a memorandum on the specific methods, objects, and rights of inspection and supervision designed to define specifically the "objects of control" referred to elliptically by the Soviet proposal of May 10.¹

The United States, in contrast to the tactics employed by the British and French, chose to "go-it-alone" and adopted a forthright approach. On September 6, Harold Stassen, who had recently been appointed as the Deputy United States Representative to the Subcommittee, responded to Sobolev's five questions by recalling the blunt admission by the May 10 Soviet memorandum that the control of a prohibition of nuclear weapons could be evaded. Citing the lack of any effective method of nuclear inspection, Governor Stassen declared that the United States had decided to

. . . now place a reservation upon all of its pre-Geneva substantive positions taken in this Sub-Committee or in the Disarmament Commission or in the United Nations on these questions in relationship to levels of armaments pending the outcome of our study jointly or separately of inspection methods and control arrangements and of our review together of this important problem. In placing this reservation upon our pre-Geneva positions, may I make it perfectly clear that we are not withdrawing any of these positions, we are not disavowing any of them. But we are indicating clearly that we do not now reaffirm them, that we do turn our attention upon this essential factor of inspection and control methods by which achievement could be obtained.²

¹"British Memorandum Concerning the Control Organ, Submitted to the Disarmament Subcommittee, September 13, 1955," U. N. Document DC/SC.1/34, in ibid., pp. 514-516.

²"Statement by the Deputy United States Representative (Stassen) to the Disarmament Subcommittee, September 5, 1955," in ibid., p. 513.

This novel declaration, by openly admitting the lack of any definite United States policy on disarmament, placed the Western delegations in an untenable position. So they bore down heavily on the three Geneva proposals for partial measures which were not affected by the blanket reservation placed on American policies. At the moment, these were the only concrete steps that their governments were prepared to seriously negotiate on.

Jules Moch, representing France, on August 29, 1955, presented a working paper developing the plan tabled by Premier Faure at Geneva.¹ Based on the reduction of military expenditures by an increasing percentage from year to year, the proposal would have siphoned off the financial resources thus released and diverted them into three channels: one part would be left in the state for use in internal economic improvements, another part being used by the state for economic aid to nations with which "it is linked constitutionally," and the third part being transferred to an international fund for development and mutual assistance to aid underdeveloped areas.

Likewise, the Eden plan for experimental international inspection in defined areas of Eastern and Western Europe was elaborated.² A small supervisory commission responsible to the Supreme Allied Commander in Europe for NATO and the Soviet Commander-in-Chief for Eastern

¹"Draft Agreement on the Financial Supervision of Disarmament and the Allocation for Peaceful Purposes of the Funds Made Available, August 29, 1955," U. N. Document DC/SC.1/27 in ibid., pp. 498-501.

²See Cmd. 9652 (1956), pp. 857-864.

Europe would have under it a number of inspection teams composed of nationals from both sides. The function of these teams would be to inspect the land, sea, air, and para-military forces declared by both sides in areas where Western and Soviet armed forces were in proximity to each other. The results, in turn, would be reported to both commanders with no further action being taken.

For his part, Harold Stassen confined himself largely to an explanation of the Eisenhower "open skies" plan in line with the American decision to actively support only its post-Geneva positions.¹ On August 30 an outline spelling out in detail how the plan would work was submitted, followed on October 7 by the issuance of another memorandum clarifying the points raised in the Subcommittee.² The United States and the Soviet Union would exchange in progressive steps all data relevant to military forces and installations ("consisting of the identification, strength, command structure and disposition of personnel, units and equipment of all major land, sea and air forces, including organized reserves and para-military forces; and a complete list of military plants, facilities, and installations with their locations").³ The disclosed

¹Cmd. 9651 (1956), pp. 691-696, 817-824; Cmd. 9652 (1956), pp. 885-893.

²"United States Outline Plan for the Implementation of President Eisenhower's Aerial Inspection Proposal, Submitted to the Disarmament Subcommittee, August 30, 1955," U. N. Document DC/SC.1/31, in Documents on Disarmament, 1945-1959, I, 501-503; "United States Memorandum Supplementing the Outline Plan for the Implementation of President Eisenhower's Aerial Inspection Proposal, Submitted to the Disarmament Subcommittee, October 7, 1955," U. N. Document DC/SC.1/36, in ibid., pp. 523-528.

³"United States Outline Plan . . .," in ibid., p. 501.

data then would be verified by unrestricted aerial reconnaissance by each inspecting country, using its own aircraft and other equipment, with the qualification that overflights would include liaison personnel from the host country and the inspecting aircraft would be checked and monitored by the host government. The original verification system proposed at Geneva was also broadened to include the stationing of ground observers "with operating land, sea and air forces, at their supporting installations and at key locations, as necessary for the verification, continued observation and reporting of each category of information."¹

In keeping with the "spirit of Geneva," the Russians responded by politely pointing out the deficiencies of the "open skies" concept, side-stepping any firm commitment one way or the other. Premier Bulganin complained that American and Soviet military installations on foreign territories were not included and that aerial photography of these facilities, in fact, would constitute a breach of sovereignty that other states might not permit. He also noted that by limiting itself to this proposal, the United States had "completely put aside the questions of reductions of armed forces, of armaments, and the prohibition of atomic weapons."²

After it became abundantly clear that neither side had anything more to add to its position at that point, the Subcommittee, on the initiative of the Western members, decided to interrupt its discussions

¹Ibid., p. 502.

²Letter from Premier Bulganin to President Eisenhower, September 19, 1955, in ibid., pp. 516-521. See also Letter from President Eisenhower to Premier Bulganin, October 11, 1955, in ibid., pp. 528-529.

on October 7 in order to report back to the Disarmament Commission.¹ The Governments of the Big Four also needed time to prepare for the upcoming October Geneva foreign ministers' conference, scheduled to consider the questions of European security and Germany, disarmament, and the development of contacts between East and West.

The Geneva Meeting of Foreign Ministers (October 27-November 16, 1955), however, did not improve upon or change the results of the Subcommittee deliberations at all except for the indication by Foreign Minister Molotov of Soviet willingness to accept aerial photography as one of the forms of control "in the final stage of carrying out measures directed towards the reduction of armaments and the prohibition of atomic weapons."² On November 10, he submitted a formal proposal which in substance duplicated the ones offered by the Soviet Union on May 10 and July 21, 1955.³

The United States, Great Britain, and France, on November 10, also sponsored a draft declaration reiterating the Western stand in favor of "gateway" measures that could lead to substantial disarmament later.⁴ Under this declaration, the four foreign ministers would have

¹"Second Report of the Sub-Committee of the Disarmament Commission," U. N. Document DC/71, October 7, 1955, in U. N., Disarmament Commission, Official Records: Supplement for April to December 1955, pp. 1-49.

²U. S., Department of State, The Geneva Meeting of Foreign Ministers, October 27-November 16, 1955, Department of State Publication No. 6156 (Washington: U. S. Government Printing Office, 1955), p. 183. (Cited hereafter as Geneva Meeting of Foreign Ministers.)

³Ibid., pp. 184-186.

⁴Ibid., pp. 199-201.

expressed their agreement on the renunciation of the use of nuclear weapons "in any manner inconsistent with the Charter of the United Nations"; the need for limitations and reductions of armaments and armed forces; the need to establish an organ responsible for the inspection and control of disarmament; "the fact that there are possibilities beyond the reach of international control for evading" the control of nuclear weapons; and the need for continued research to perfect an effective control system for nuclear-weapons material. They would also have proposed that the states concerned, in order to help prevent surprise attack, "should agree promptly to put into early operation" President Eisenhower's proposal for an exchange of military blueprints and aerial inspection and Premier Bulganin's proposal for the establishment of control posts at key check-points. Noticeably absent from this document was any direct reference to the elimination of nuclear weapons--a customary provision of previous statements of principles.

With the conclusion of the deadlocked Geneva Meeting of Foreign Ministers, the scene of the disarmament negotiations shifted once again --this time to the Disarmament Commission where on November 23, 24, and 25 the second report of the Subcommittee was debated.¹ There, both sides could agree on nothing more than a procedural resolution transmitting to the General Assembly and the Security Council the report and records of the proceedings of the Subcommittee.

¹See U. N., Disarmament Commission, Official Records: 45th Meeting, October 21, 1955; 46th Meeting, October 21, 1955; 47th Meeting, November 23, 1955; 48th Meeting, November 24, 1955; 49th Meeting, November 25, 1955.

The two weeks of debate on the report in the General Assembly during the first part of December, 1955, produced two resolutions: one on December 8 unanimously approving the establishment of a multinational scientific committee to assemble information on radioactive fallout from nuclear weapon testing,¹ and one on December 16 suggesting that the Subcommittee of Five be reconvened by the Disarmament Commission.² Furthermore, the resolution, overruling the opposition of the Soviet Bloc, (1) took note "that special technical difficulties have arisen in regard to the detection and control of nuclear weapons materials"; (2) called for continued efforts to reach an agreement on a comprehensive disarmament plan; and (3) urged, however, that priority be given to the exchange of military blueprints, mutual aerial inspection, the establishment of control posts at strategic centers, as well as "all such measures of adequately safeguarded disarmament as are now feasible." In short, through this resolution the General Assembly expressed its approval of the shift in emphasis from comprehensive disarmament to more realistic partial measures as the immediate goal of the arms control negotiations.

The Fourth Session of the Subcommittee,
March 10-May 6, 1956

After being authorized by the Disarmament Commission on January

¹General Assembly Resolution 1113 (II), December 8, 1955, in Documents on Disarmament, 1945-1960, I, 361-362.

²General Assembly Resolution 1114 (II), December 16, 1955, in ibid., p. 365. The vote on the resolution was 20-7-3 (the Soviet bloc voting negatively).

23, 1956, to resume its inquiry, the Subcommittee reconvened in London on March 19 and continued its discussions for eighteen meetings before bogging down and adjourning again.¹ The movement toward increased flexibility and innovation in disarmament policies, which became apparent first in 1955, was greatly speeded up in the 1956 negotiations. The British and French, the Russians, and the Americans each presented proposals updating their policies on disarmament.

On March 10, a revised version of the comprehensive Anglo-French Plan of June 11, 1954, was tabled in a move to take account of the shift of Western policy away from drastic disarmament due to the technical impossibility of controlling the elimination of existing nuclear-weapons stockpiles.² The plan retained the concept of phased disarmament (the gradual implementation of both the programmatic and administrative aspects), but it scaled down considerably the scope of disarmament. In stage one, the participating states would agree not to use nuclear weapons except in defense against aggression; armed forces, conventional armaments, and military expenditures would be "frozen" at their existing levels; aerial surveys and land control posts (including mobile control teams and financial inspectors) would verify the data submitted by

¹ U. N. Disarmament Commission, Official Records: 50th Meeting, January 23, 1956. See Great Britain, House of Commons, Report on the Proceedings of the Sub-Committee of the Disarmament Commission Held at Lancaster House, London, March 19-May 4, 1956, Cmd. 9770 (London: Her Majesty's Stationery Office, 1956). (Cited Hereafter as Cmd. 9770.)

² U. N. Document DC/SC.1/38, March 19, 1956, in Documents on Disarmament, 1945-1959, I, 595-598.

states as to the level of their military forces and guard against surprise attack; and the General Assembly of the International Disarmament Organization would meet to determine the level of armed forces and arms of participating states other than the Big Five. In stage two, nuclear explosions would be limited (but not prohibited) and the first half of the agreed reductions of conventional forces and armaments (the size not specified in the proposal) would be achieved. In stage three, nuclear test explosions and the manufacture of nuclear weapons would be prohibited at the start; the second half of the conventional program would be executed; and at the beginning of the last quarter of these prescribed reductions, a complete prohibition on the use of nuclear weapons would come into force.

The passage from one stage to the next would require certification by the Control Organ that it was in a position to effectively supervise the next phase and the unanimous concurrence of the Executive Committee (the Big Five plus ten non-permanent members). Were the decision of the Executive Committee not unanimous, there would be a six months' waiting period after which the matter would be referred to the Security Council should there not be a unanimous agreement then. Moreover, in the event any aggression occurred, the Executive Committee would have the authority to suspend the disarmament program.

Subsequently, on May 3, an Anglo-French working paper elaborating the control provisions for each of the three stages was brought to the attention of the Subcommittee.¹ The International Disarmament Organiza-

¹"Anglo-French Working Paper on Control, Submitted to the Disarmament Subcommittee May 3, 1956," U. N. Document DC/SC.1/44, ibid., pp. 615-622.

tion, to be responsible for the administration of the proposed disarmament program, would be organized in three parts: a General Assembly of all participating states; an Executive Committee of the Big Five and ten other states elected by the General Assembly; and a Director-General who would administer in an impartial manner the detailed apparatus of control consisting of control posts, mobile inspection teams, financial controllers, and aerial survey teams. In the first stage, these inspectors would have access to only the following "objects of control": all armed forces (including para-military and security forces); conventional, chemical, and bacteriological armaments; and all installations using or storing these weapons. In the second stage, non-nuclear weapons factories, shipyards, and other installations; merchant vessels and civil aircraft (above an agreed speed and size) under construction; and nuclear test explosions would also be controlled. In the third stage, control would be further expanded to include nuclear material of weapon grade not made up into weapons and establishments where nuclear material is produced, used, or manufactured into weapons.

Thus although the Anglo-French Plan was modified by substituting a prohibition on the use of nuclear weapons for a ban on the possession of them, it still provided for substantial limitations on both nuclear and non-nuclear elements of military establishments. The Russian and American proposals, on the other hand, bypassed the comprehensive approach to disarmament and dealt exclusively with partial measures in the first stage, leaving unanswered the question of what would follow next.

On March 27 the Soviet representative, Andrei Gromyko, brushed

aside the Anglo-French Plan tabled earlier. He held that it was designed to legalize the use of nuclear weapons under the pretext of resistance to aggression. Moreover, he objected because it did not provide for the destruction of this class of weapons.¹ As an alternative, he then proposed to leave in abeyance for the time being the knotty problem of nuclear weapons and to go ahead with a reduction of conventional armaments and armed forces alone. This suggestion marked a spectacular reversal of traditional Soviet disarmament strategy. Ever since 1946, all Russian schemes for reducing conventional forces (both the overall one-third reduction promoted between 1948 and 1954 and the fixed ceilings advocated after 1954) were made contingent upon Western acceptance of an unqualified prohibition of nuclear weapons. Now, for a brief period only, the Soviet Union seemed willing to proceed with multilateral reductions of military personnel and equipment in what was the sole area of possible consensus between the two sides on a disarmament program.

Carefully pointing out that he was not retracting the Soviet offer of May 10, 1955, for comprehensive disarmament, Gromyko asked the Subcommittee, as an initial step prior to the settlement of East-West political differences, to agree on a conventional disarmament treaty with the following provisions: (a) during the first three months a "freeze" on armed forces and conventional armaments at their levels as of December 31, 1955; (b) from 1956 to 1958, a gradual (but unphased) reduction of the armed forces of the five major nations down to 1 to 1.5

¹Cmd. 9770 (1956), p. 12.

million men for the United States, the Soviet Union, and China, and 650,000 for the United Kingdom and France; (c) a world conference to determine the size of the forces of other states, not to exceed 150,000 to 200,000 men; and (d) use of the funds made available by the reductions for internal economic improvement and assistance to underdeveloped countries.¹

To ensure fulfillment of the terms of the agreement, two kinds of controls would be established: first, a network of control posts at main ports, railway junctions, airports, and on main highways to prevent the concentration of ground, air, and naval forces for a surprise attack; and, second, a Control Organ with its own staff of inspectors stationed permanently on the territory of the participating states. The inspectors would have access at all times to all "objects of control" which, for the first time, were identified specifically as including "military units; stores of military equipment and ~~ammunition~~; land, naval and air bases; factories manufacturing conventional armaments and ~~ammunition~~."² Furthermore, departing from its long-standing policy that control and disarmament must be effected simultaneously, the Soviet Government now approved of the positioning of the inspectors "in good time to ensure that they are able to begin carrying out their functions at the moment when States begin the execution of the measures provided for in

¹ "Soviet Proposal Introduced in the Disarmament Subcommittee: Draft Agreement on the Reduction of Conventional Armaments and Armed Forces, March 27, 1956," U. N. Document DC/SC.1/41, in Documents on Disarmament, 1945-1959, I, 603-607.

² Ibid., p. 606.

the agreement."¹ Aerial inspection, however, was rejected at this stage of disarmament but would be considered as one of the possible methods of control "when confidence among States has been strengthened."²

In summary, by acknowledging that international inspectors would be positioned prior to any actual reductions and spelling out, albeit in general terms, the objects of control,³ the Soviet position in principle met two of the indispensable conditions set by the West for a disarmament agreement. Yet the Russians continued to make the control agency subject to the Security Council and to insist on force levels limited to 200,000 men for countries other than the Big Five--provisions which would seriously undermine Western security. Moreover, the Soviet Union was proposing immediate force reductions for the Big Five which corresponded with figures recommended by the British and French as the levels to be achieved at the completion of a comprehensive disarmament program.

Included in the document submitted by Gromyko were also three subsidiary measures that could be negotiated upon separately: (1) the establishment of a zone of limitation and inspection of armaments in Europe, "including territory of both parts of Germany and of States adjacent to them," and involving, first, agreed ceilings on the forces of America, Britain, France, and Russia in the zone and, second, a prohibition of the stationing of nuclear weapons in the zone; (2) the discontinuance of

¹Ibid.

²Ibid.

³See "Anglo-French Memorandum Submitted to the Disarmament Subcommittee: Reduction of Armed Forces, March 20, 1955," in ibid., pp. 432-433.

thermonuclear (but not atomic) weapons tests "forthwith"; and (3) the reduction of military expenditures by up to 15 per cent of the military budgets for the preceding year.¹

Like the Soviet Union, the United States laid before the Subcommittee a "package" of first stage proposals in addition to some preliminary measures for separate consideration. Recognizing the need to start somewhere with the difficult and complex matter of inspection, Governor Stassen on March 21, 1956, suggested two small steps that could be taken immediately. To begin with, he asked the five states represented on the Subcommittee to agree to a reciprocal technical exchange mission for the purpose of a "preliminary study of the methods of control and inspection and reporting which would apply if a disarmament convention were successfully concluded."² Delegations of thirty to seventy technically competent persons would visit each other's countries for six months and have freedom of movement and access to facilities on a reciprocal basis.

Next, Stassen suggested that the same five states might agree to "a short demonstration control and inspection test within a limited area of the United States and the Soviet Union."³ A test demonstration

¹"Soviet Proposal Introduced in the Disarmament Subcommittee: Draft Agreement on the Reduction of Conventional Armaments and Armed Forces, March 27, 1956," in ibid., p. 607.

²"United States Working Paper Submitted to the Disarmament Subcommittee: Technical Exchange Mission, March 21, 1956," U. N. Document DC/SC.1/39, March 21, 1956, in ibid., pp. 599-600.

³U. S., Department of State, U. S. Participation in the UN: Report by the President to the Congress for the Year 1956, Department of State Publication No. 6577 (Washington: U. S. Government Printing Office, 1957), p. 8. For the text of the proposal, see U. N. Document DC/SC.1/40, March 21, 1956, in Documents on Disarmament, 1945-1959, I, 600-601.

of 20,000 or 30,000 square miles would be drawn in each country so that it encompassed at least one airfield, one railway terminal, one major highway junction, and some military installations and units, but no especially sensitive or secret facilities. Simultaneously with the exchange of information on the military personnel and equipment in the designated areas, demonstration control teams would move in and establish control posts at the key points just mentioned and take aerial photographs of the test areas. Demonstration inspection teams would then be allowed to inspect the military units and installations within the specified areas.

Besides these experimental steps, Mr. Stassen on April 3, 1956, outlined a first stage disarmament plan that placed on record an affirmative American position--the first since the United States attached reservations to its proposals in September, 1955.¹ According to the Stassen plan, the five nations on the Subcommittee would organize a Preparatory Armaments Regulation Commission to work out the details of a first stage disarmament program. Following agreement by the preparatory commission on the control machinery and on the permitted levels of forces, armaments, and military expenditures, the five member states would provide the commission with a blueprint of their conventional military establishments;

¹"United States Draft Working Paper Submitted to the Disarmament Subcommittee: First Phase of a Comprehensive Agreement for Disarmament, April 3, 1956," U. N. Document DC/SC.1/42, in ibid., pp. 608-613. A note was attached to the document stating that it was not put forward as a binding statement of policy but rather as a working paper to facilitate consideration by the Subcommittee. Subsequently, it received recognition as official American policy. Disarmament: The Intensified Effort, 1955-1958, pp. 23-24. A summary memorandum reiterating the main features of the

stabilize armaments, armed forces, and military appropriations at their December, 1955, levels; and install the inspection and control system. The control system would consist of ground posts, aerial survey, and a world-wide communications network. Upon the completion of the control communications centers, member states would give advance notice to them on "all projected movements of land, sea, or air armed forces through international air or water or over foreign soil."¹

At that point, the preparatory disarmament organization would take the lead in forming a permanent world-wide Armaments Regulation Organization made up of an Armaments Regulation Council of all member states, an Executive Council with permanent and non-permanent members, and a Director-General. Upon an affirmation by the Director-General and the Executive Committee of the capability of the control system to effectively verify and supervise them, four substantive arms control measures would be put into effect: the lowering of force levels, accompanied by corresponding reductions of armaments and military budgets, down to 2.5 million men for the United States, the Soviet Union, and China and 750,000 men for France and Britain; the reduction of the armed forces of other countries down to ceilings no higher than 500,000 men; a prohibition on the use of the future production of fissionable materials for the manufacture of explosive weapons and the transfer of agreed

Stassen plan was introduced on May 3, 1956. U. N. Document DC/SC.1/45, May 3, 1956, in Documents on Disarmament, 1945-1959, I, 623-625.

¹"United States Draft Working Paper. . . , April 3, 1956," in ibid., p. 611.

amounts of fissionable materials from existing stocks over to peaceful uses;¹ and the limitation and monitoring of the testing of nuclear weapons "in an agreed manner" under the control of the Armaments Regulation Council.

Taken altogether, the novel proposals tendered by both sides at the fourth session of the Subcommittee moved the disarmament negotiations toward a more realistic, viable frame of reference. Even if the Soviet approach to disarmament was liberalised considerably, most of the older points of disagreement still remained, however, and several more were added. Beyond perennial issues, such as the powers of the control organ, the ceilings on conventional force levels, and the need for the phasing of disarmament, the discussions deadlocked in 1956 over two new Soviet demands: first, that nuclear and conventional disarmament be considered separately; and, second, that major arms reductions be instituted prior to political settlements.

Taking note that these "differences between the position of the Soviet delegation and those of the other four delegations were not reconciled in the meetings of the Sub-Committee," the Western representatives issued a declaration on May 4, 1956, reaffirming their intentions to seek a reconciliation of opposing points of view, but on the basis of six fundamental principles: (1) The disarmament program should proceed

¹This was the first post-Geneva proposal by the United States relating directly to the limitation of nuclear weapons. It was originally presented to Premier Bulganin in a letter from President Eisenhower on March 1, 1955. The text of the Eisenhower letter is printed in *ibid.*, pp. 132-133.

by stages, progress from one stage to another "depending upon the satisfactory execution of the preceding stage and upon the development of confidence through the settlement of major political problems." (2) The program should begin with effectively controlled significant reductions in armed forces "to such levels as are feasible" under existing world conditions. (3) "At an appropriate stage and under proper safeguards," there should be a "cutoff" of the production of nuclear weapons with all future production of nuclear material being devoted to peaceful uses. (4) A strong control organization with inspection rights should operate from the outset and should be expanded as the amount of disarmament is increased. (5) Preliminary demonstrations of inspection methods would facilitate the development of an effective control system and could hasten an agreement on a disarmament program. (6) Finally, provision should be made for the suspension of the program if any party should fail to carry out its obligation or a threat to the peace arises.¹

On May 4 the Subcommittee adjourned after adopting a factual report transmitting the records of its deliberations to the Disarmament Commission.² Two months later, from July 3 to July 16, 1956, the Disarmament Commission convened in New York and reviewed the report in eleven meetings. Placed before it were a draft resolution by the United States, the United Kingdom, France, and Canada reiterating the six principles of the Four Power declaration of May 4, 1956;³ A Soviet draft declaration under

¹"Declaration by the United States, the United Kingdom, France, and Canada, Made in the Disarmament Subcommittee, May 4, 1956," U. N. Document DC/SC.1/46, in ibid., pp. 625-626.

²U. N. Document DC/83, May 4, 1956, in U. N. Disarmament Commission, Official Records: Supplement for January to December 1956, pp. 1-38.

³U. N. Document DC/87, July 3, 1956, in ibid., pp. 48-49.

which states would assume a solemn obligation to refrain "from the use or the threat of force and the use of atomic or hydrogen weapons";¹ a note verbale from the Indian Government concerning a cessation of nuclear testing;² a Yugoslavian draft resolution urging the Subcommittee to continue its efforts to reach agreement on general disarmament while also seeking an early agreement on feasible disarmament measures, particularly a cessation of nuclear weapon testing;³ and a Peruvian draft resolution endorsing the principles of the Four Power declaration and referring back to the Subcommittee for further study all proposals before the Commission. Unable to take any positive action, the Commission adopted the Peruvian proposal on July 16 by a 10-1-1 vote (Russia opposing and Yugoslavia abstaining).

The only shift in policy that emerged from the debate in the Commission was an offer by the Soviet Union on July 12 to accept the first-stage force levels proposed by the United States (2.5 million men for America, China, and Russia, and 750,000 for Britain and France).⁴ This was contingent, however, on Western acceptance of second stage reductions to 1 to 1.5 million for America, China, and Russia, and 650,000 for Britain and France.

¹ U. N. Document DC/30, July 5, 1950, in ibid., p. 43.

² U. N. Document DC/16, July 2, 1950, in ibid., pp. 46-47.

³ U. N. Document DC/32, July 10, 1950, in ibid., pp. 50-51.

⁴ U. N. Document DC/27, July 12, 1950, in ibid., pp. 51-52.

⁵ U. N., Disarmament Commission, Official Records: 37th Meeting, July 12, 1950, pp. 14-15.

No further meetings of East-West disarmament negotiators took place during the second half of 1956, in part because of developments that increased the level of international tension sharply. In mid-October, 1956, mass disturbances broke out in Communist Poland and Hungary and flared into an open revolt in Hungary. The Soviet Union responded on November 4 with a nationwide attack that brutally suppressed the anti-Communist Hungarian revolution. At about the same time, by coincidence Israel invaded the Sinai peninsula of Egypt on October 29, followed by an Anglo-French air attack on Egypt on October 31 and British French troop landings in the Suez Canal Zone on November 5. About a month later these troops were withdrawn, but only after pressure was brought to bear. Not only did East-West tensions flare up as a result of these crises, but Anglo-American relations were also severely strained by United States behavior in the Suez War.

In the absence of direct negotiations, the disarmament issue was kept boiling by three important exchanges of letters between President Eisenhower and Premier Bulganin.¹ In the verbal jousting, Bulganin took the offensive and Eisenhower parried his thrusts. Bulganin wanted the United States to follow the Soviet example of making unilateral

¹ Eisenhower to Bulganin, August 4, 1956, in Documents on Disarmament, 1945-1959, I, 685-687; Bulganin to Eisenhower, September 11, 1956, in ibid., pp. 688-694; Bulganin to Eisenhower on Nuclear Weapon Tests, October 17, 1956, in ibid., pp. 695-696; Eisenhower to Bulganin on Nuclear Weapon Tests, October 21, 1956, in ibid., pp. 697-698; Bulganin to Eisenhower, November 17, 1956, in ibid., pp. 720-721; and Eisenhower to Bulganin, December 31, 1956, in ibid., pp. 729-730.

force reductions;¹ to discontinue nuclear weapons tests without international controls; to agree to a summit meeting to discuss disarmament; and to accept Soviet disarmament proposals presented to the Subcommittee in 1956. To the "old line" Russian policies, Bulganin added one new feature that was to play a prominent role in the 1957 negotiations. He stated that

. . . the Soviet Government for the purpose of facilitating the quickest achievement of agreement is prepared to consider using aerial photography in the area in Europe where basic military forces of the North Atlantic Pact are located and in countries participating in the Warsaw Pact to a depth of 800 kilometers to the East and West from the line of the above-mentioned military forces, if there is agreement of the appropriate states.²

The Fifth Session of the Subcommittee
March 18-September 6, 1957

The path back to the conference table followed the same routine that had kept the disarmament negotiations alive for a decade despite the lack of any positive results. The Disarmament Commission transmitted to the General Assembly a procedural report containing the records of the Subcommittee and Commission meetings in 1956.³ There followed an inclusive debate in the General Assembly from January 14 to January 25,

¹On May 14, 1956, the Soviet Union announced that it was unilaterally reducing its armed forces by 1.2 million men. A reduction of 640,000 men was also announced in 1955 after the Geneva summit conference.

²"Declaration of the Soviet Government Concerning the Question of Disarmament and Reduction of International Tension, November 17, 1956," in *ibid.*, p. 727.

³U. N., Disarmament Commission, Official Records: 62nd Meeting, December 20, 1956.

1957, on the question of disarmament¹ which led to the passage of a unanimous resolution on February 14, 1957, requesting "the Disarmament Commission to reconvene its Sub-Committee at an early date" to consider the various proposals submitted to the United Nations.²

Included among these proposals were three draft resolutions by the Soviet Union that dampened hopes for an early reconciliation of differences with the West: one calling for a cessation without controls, of tests of atomic and hydrogen weapons;³ a second instructing the General Assembly to convene a special session of the General Assembly on disarmament;⁴ and a third that would have added Egypt, India, Poland, and a Latin American country to the Disarmament Commission and India and Poland to the Subcommittee.⁵

The United States, with an eye on the forthcoming session of the Subcommittee, also used the General Assembly debate to enunciate the line of policy it would follow in the Subcommittee negotiations. In the first major declaration of American policy on disarmament since the Stassen plan of April 3, 1956, Ambassador Lodge on January 14, 1957, identified five objectives toward which the renewed negotiations should be directed:

¹U. N., Department of Public Information, Yearbook of the United Nations, 1956, pp. 100-104.

²General Assembly Resolution 1011 (XI), February 14, 1957, in Documents on Disarmament, 1945-1959, II, 747-748.

³U. N. Document A/C.1/L.160, January 14, 1957, in ibid., pp. 736-737.

⁴U.N. Document A/C.1/L.161, January 14, 1957, in ibid., pp. 737-738.

⁵U.N. Document A/C.1/L/164, January 24, 1957, in ibid., p. 739.

1. To reverse the trend toward larger stockpiles of nuclear weapons and to reduce the future nuclear threat.
2. To provide against great surprise attack and thus reduce the danger of major war.
3. To lessen the burden of armaments and to make possible improved standards of living.
4. To insure that research and development activities concerning the propulsion of objects through outer space be devoted exclusively to scientific and peaceful purposes.
5. To ease tensions and to facilitate settlement of difficult political issues.¹

As to concrete proposals, he reaffirmed the provisions of the Stassen plan of 1956 for a "cutoff" of the production of fissionable materials for weapons purposes followed by the reduction of existing stocks;² a modest reduction of conventional forces; and surprise attack prevention. To these were added two new proposals: first, "to limit, and ultimately to eliminate, all nuclear test explosions" as a part of an arrangement to control the future production of fissionable material; and second, to bring the testing of outer space objects "under international inspection and participation."³

Thus when the longest (seventy-one formal meetings)--and the last session of the Subcommittee opened in London on March 18, 1957, the initial positions of both sides were already well-drawn.⁴ At the

¹"Statement by the United States Representative (Lodge) to the First Committee of the General Assembly [Extracts], January 14, 1957" in ibid., pp. 735-736. See also "United States Memorandum Submitted to the First Committee of the General Assembly, January 12, 1957," U. N. Document A/C.1/783 in ibid., pp. 731-734.

²The United States claimed that the future production of fissionable materials, but not the manufacturing or assembling of nuclear weapons, could technically be controlled.

³Ibid., pp. 732-733.

⁴See Great Britain, House of Commons, Report on the Proceedings

outset, the British representative (Selwyn Lloyd) expressed his preference for the comprehensive, phased approach embodied in the Anglo-French Plan (introduced originally on June 11, 1954, and revised on March 19, 1956). The Soviet representative (Valerian Zorin) tabled a set of comprehensive proposals reiterating the main points contained in the Bulganin-to-Eisenhower letters of 1956 and several earlier Russian propositions.¹ For his part, Harold Stassen reaffirmed the Lodge declaration of January 14, 1957, as broadly representing the views of the United States.²

The fifth session of the Subcommittee, however, was unique in that neither side stuck rigidly to the opening proposals summarized above. For the first time during the postwar negotiations, there was a significant give-and-take interaction between the opposing viewpoints--an indispensable prerequisite for bona fide negotiations. Indicative of the willingness of all parties to engage in serious negotiations was the adoption of a new procedural technique whereby the component elements of a disarmament treaty were considered separately "point by point rather than plan against plan."³

of the Sub-Committee of the United Nations Disarmament Commission Held at Lancaster House, London, March 18-September 6, 1957, Cmd. 333 (London: Her Majesty's Stationery Office, 1957). (Hereafter cited as Cmd. 333.)

¹U. N. Document DC/SG.1/49, March 18, 1957, in Documents on Disarmament, 1945-1959, II, 752-757.

²Disarmament: The Intensified Effort, 1955-1958, pp. 33-34.

³Ibid., p. 35.

On March 28 the Subcommittee agreed on the order of the subjects for discussion: nuclear test explosions, conventional disarmament, nuclear disarmament, the international control organ, missiles and rockets, zones of limitation and inspection, and "other matters."¹ These, in turn, were discussed in detail during the first part of the session which lasted through May 16. At this point the talks were recessed for ten days to allow the delegates to confer with their home governments, and then they were resumed again on May 27.

The serious exchange of views in the exploratory talks was climaxed on April 30 by the introduction of a fresh Russian proposal on partial measures which, while unacceptable in its original form, suggested that the Soviet Union might be genuinely interested in negotiating a disarmament agreement with the West.² The plan called for:

1. A reduction in armed forces down to 2.5 million men for America, China,³ and Russia, and 750,000 for Britain and France, coupled with a prior commitment to further reductions to 1-1.5 million and 650,000 respectively in the second stage.

2. A 15 per cent reduction in military budgets and conventional armaments in the first stage.

3. The establishment of limited controls in the form of a control organ (under the Security Council) to collect and analyze information

¹Ibid., p. 36.

²"Soviet Memorandum Submitted to the Disarmament Subcommittee: Implementation of Partial Disarmament Measures, April 30, 1957," U. N. Document DC/SC.1/55, in Documents on Disarmament, 1945-1959, II, 778-787. The proposal was made after the Russian delegate returned from consultations in Moscow during the Easter recess.

³The document indicated Soviet willingness, however, to conclude a treaty to which Communist China was not a party. Ibid., p. 782.

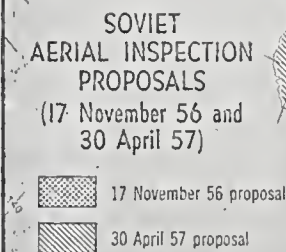
provided by states, and control posts stationed at large ports, at railway junctions, and on main motor highways to guard against "the dangerous concentration of armed forces and armaments." Control posts would be restricted to NATO and Warsaw Pact countries, "the western regions of the Soviet Union, and the eastern part of the United States." Airfields would come under control at the end of the second stage and then only if an agreement on the prohibition and elimination of atomic and hydrogen weapons were reached.

4. Aerial reconnaissance in two zones: from zero degrees to 25 degrees east longitude and 54 degrees north latitude to 39 degrees, 33 minutes north latitude (covering an area bounded roughly by London and Riga on the north and Athens and Madrid on the south); and all Soviet territory east of 108 degrees east longitude and all United States territory west of 90 degrees west longitude (covering most of Siberia and, roughly, all of the United States west of the Mississippi River. (See Map 1.)

5. An unconditional ban on the use of atomic and hydrogen weapons of all types, including "rockets carrying atomic and hydrogen warheads."

6. The examination of the question of abolishing foreign bases in order to determine "which such bases can be abolished within one or two years."

7. A one-third reduction of the American, British, French, and Russian forces stationed in Germany and reductions, to be negotiated later, of troops of the same powers stationed in NATO and Warsaw Pact



Map 1 -- Soviet Aerial Inspection Proposals (November 17, 1945, and April 30, 1957). Documents on Disarmament, 1945-1959, II, 1597.

countries. This was stated as a desirable but not an essential feature of an agreement.

8. The discontinuance of atomic and hydrogen weapon testing, to be agreed upon separately from the general problem of nuclear weapons.

9. Agreement on measures to put an end to war propaganda and to "prevent ideological conflict from entering into relations between states."

Although these proposals were weighted overwhelmingly in favor of Russian military interests, they offered the most realistic basis for negotiations yet put forward by the Soviet Government. In particular, they: (a) did not renew the 150,000-200,000 figure previously proposed for the forces of states other than the Big Five; (b) accepted in principle aerial inspection of Soviet territory; (c) omitted definite time limits for carrying out the stages in the reduction of conventional forces; (d) dropped the traditional Soviet demand for an immediate complete elimination of foreign bases; (e) left off the demand for a prohibition on the production of nuclear weapons and for the destruction of existing stockpiles in the first stage of disarmament; and (f) relaxed the requirement that forces stationed in Germany must be reduced as a condition for a conventional disarmament treaty.

The conciliatory manner adopted by the Soviet delegation prompted a flurry of activity in Western capitals during the ten-day recess of the Subcommittee in mid-May. "The excited and optimistic Stassen hurried to Washington to discuss the Soviet proposal and possible counter-offers to it with the President and the Cabinet, the National Security

Council and leaders of Congress."¹ Returning with new instructions, he told the Subcommittee on May 27 that:

. . . we are prepared to move half-way if the representatives of the other four Governments here will also move half-way towards the objective of concluding such a partial agreement for the first step or first stage reduction, limitation, control and inspection of armaments and armed forces and expenditures, the reduction of the nuclear threat with which the world is concerned, the lessening of the danger of war, the minimizing of concern with regard to surprise attack, and the improvement of the prospects of peace. . . .²

Throughout the next few weeks there were a number of substantive shifts in the policies of all five governments, after which Western and Soviet positions stiffened perceptibly and the negotiations foundered. On the nuclear testing, the Soviets at first held out for an immediate uncontrolled ban prior to arranging for the control of the production of nuclear weapons. With available instruments, nuclear explosions could readily be detected outside of the countries where they occurred, the Russians contended. Then on March 26 they offered to conclude an agreement on a temporary, uncontrolled suspension of nuclear tests, with a fixed time limit.³ But on June 14 their stand was revised further by a proposal for "the immediate cessation of all atomic and hydrogen weapons tests, if only for a period of two or three years," monitored by

¹ Sherman Adams, Firsthand Report: The Story of the Eisenhower Administration (New York: Harper and Brothers, 1961), p. 327.

²Disarmament: The Intensified Effort, 1955-1958, p. 40.

³"Statement by the Soviet Foreign Ministry Regarding Suspension of Nuclear Weapons Tests, March 26, 1957," in Documents on Disarmament, 1945-1959, II, 773.

control posts on the territory of the Soviet Union, the United States, and the United Kingdom, and in the Pacific Ocean area.¹ The proposed control commission would report to the Security Council, however, meaning that the veto would apply.

Meanwhile, the Western position on nuclear testing was also modified substantially. The Western camp, it will be recalled, entered the negotiations firmly committed to the limitation and, eventually, the prohibition of tests provided effective controls were established on the future production of fissionable materials. Only in that way could the threat of nuclear war be reduced, it was argued. As a preliminary step, however, the United Kingdom on May 6 proposed the advance registration of nuclear test explosions with the United Nations and the establishment of a committee of technical experts to consider possible methods of limiting nuclear testing.²

On July 2, two weeks after the Soviets agreed to international controls, a Western statement was issued, cautiously welcoming this as a move bringing "within the realm of possibility a temporary suspension of nuclear testing as a part of a first step in disarmament" and proposing a conference of experts to design an inspection system capable of verifying a test cessation.³ No firm counterproposal was made until

¹"Soviet Proposal Introduced in the Disarmament Subcommittee: Cessation of Atomic and Hydrogen Weapon Tests, June 14, 1957," U. N. Document DC/SC.1/50, in ibid., p. 791.

²U. N. Document DC/SC.1/56, May 6, 1957, in Cmd. 333 (1957), p. 50. This was the genesis of the Conference of Experts which met in Geneva in July and August, 1958, to devise a test ban inspection system.

³U. N. Document DC/SC.1/59, July 2, 1957, in Documents on Disarmament, 1945-1959, II, 802-803.

August 21, however, when the Western Four suggested: (1) a cessation of nuclear tests under international control for twelve months upon the entry into force of a partial disarmament agreement; (2) a continuation of the test suspension for another twelve months if at the end of the first period each party was satisfied with the operation of the inspection system and with the progress being made on the development of a means of controlling the production of fissionable materials; and (3) the resumption of tests, at the discretion of each party, at the end of two years if a "cutoff" of the production of fissionable materials for weapons purposes had not been installed.¹ Possibly because of its own weapons development program, the Soviet Union was unwilling to negotiate any further on this proposal until almost a year later.

There was also a narrowing of differences on the question of force levels and armaments. Governor Stassen on June 25 expressed the willingness of the United States, after first stage reductions of American and Russian forces to 2.1 million as stipulated in the plans of both sides, to negotiate on further reductions down to 2.1 million and 1.7 million in two additional stages, provided three conditions were fulfilled; first, progress toward the solution of major political issues; second, satisfactory operation of the inspection system; and, third, adherence to the treaty by 'essential states' (i.e., China).² Later, Great Britain

¹Statement by Harold Stassen to the Disarmament Subcommittee, August 21, 1957, in *ibid.*, p. 34.

²Statement to the Disarmament Subcommittee, June 25, 1957, in *ibid.*, pp. 70-71.

and France agreed to force levels of 700,000 and 650,000 for themselves in the two further stages of reductions proposed by the United States.

The Soviet representative, responding to the American concession, stated on July 19 that his government would accept these second and third stage force levels, provided the reductions "were in fact effected under the partial arrangement and were not made contingent upon political settlement and other issues."¹ The gap between the Russian and American positions on that point was narrowed no further.

On the question of the arms reductions to accompany the lowering of force levels, the two sides were not as sharply divided. The United States desired a 10 per cent cut in major classes of weapons² while the Soviet Union called for an overall reduction of 15 per cent in conventional armaments and military expenditures.³ As an alternative solution, Stassen suggested on June 26 that the Soviet Union submit a list of the arms it would dispose of under the 15 per cent reduction clause in the Soviet proposal of April 30, 1957. The United States would likewise present a proposed list of armaments reductions it was prepared to make.⁴ After reaching agreement on these lists, the military equipment designated in them would then be stored in internationally supervised disarmament

¹Statement by Zorin to the Disarmament Subcommittee, July 19, 1957, in ibid., p. 832.

²Statement by Stassen to the Disarmament Subcommittee, March 18, 1957, in ibid., p. 761.

³"Soviet Memorandum . . . , April 30, 1957," in ibid., p. 732.

⁴"Disarmament: The Intensified Effort, 1955-1958, p. 47.

depots to await a decision in later negotiations as to its final disposal. The Soviet negotiator accepted this concept in principle but steadfastly refused to discuss the details of the implementation of arms reductions unless the Western powers gave up their insistence that an agreement on armed forces reductions beyond the first stage should wait upon progress in the settlement of political problems.

On the question of ground and aerial inspection to prevent surprise attack, the position of the West was least flexible, in part because of a deep division within the Western alliance over the kind of plan that should be offered to the Russians. Indeed, the breakdown of the negotiations came about largely as the result of controversy over this issue. While the NATO governments were still carrying on consultations in an effort to agree on a counterproposal to the Russian plan of April 30, 1957, for inspection zones in Europe, the Soviet Union, and the United States, Harold Stassen began bilateral discussions with the Russians outside of the Subcommittee.¹ This stirred up bitter resentment among the British, French, and Canadians. Chancellor Adenauer, too, was wary lest the United States agree to an inspection zone in Central Europe which would tend to perpetuate the status quo division of Germany.²

¹Adams, pp. 327-328.

²For example, in the Eisenhower-Adenauer Declaration, issued in Washington on May 28, 1957, the President ". . . stressed that any measures for disarmament applicable to Europe would be accepted by the United States only with the approval of the NATO allies . . . and taking into account the link between European security and German reunification. He assured the Chancellor that the United States does not

As a result, Stassen was reprimanded, and Secretary of State Dulles flew to London on July 27, 1957, and intervened personally in the negotiations in an attempt to restore harmony within the Western camp. Taking Stassen's place at the conference table, Secretary Dulles on August 2, three months after the Russian inspection plan was offered, presented the Western response to it.¹ The Western proposals granted the Soviet Union two options: the whole of the territory of the continental United States (plus Alaska and the Aleutian Islands), Canada, and the Soviet Union could be included in the inspection zone; or, alternatively, there could be a more limited area comprising all of the territory of the three countries north of the Arctic Circle, plus parts of Greenland and Norway and all of Alaska and Kamchatka. Provided the USSR accepted one of these zones and "subject to the indispensable consent of the countries concerned," an area including all of Europe, bounded in the south by 40 degrees north latitude, in the west by 10 degrees west longitude, and in the east by 60 degrees east longitude, would be open to inspection. Should this not be acceptable to the Soviet Union, the Four Powers offered to discuss a more limited zone of inspection in Europe "on the understanding that this would include a

intend to take any action in the field of disarmament which would prejudice the reunification of Germany." Documents on Disarmament, 1945-1959, II, 790.

¹"Western Working Paper Submitted to the Disarmament Subcommittee: Systems of Inspection To Safeguard Against the Possibility of Surprise Attack, August 2, 1957." U. N. Document DC/SC.1/62/Rev. 1, in ibid., pp. 837-839. For the statement by Secretary Dulles to the Subcommittee, see ibid., pp. 839-845.



Map 2 -- Western Aerial Inspection Proposal (August 29, 1957). Documents on Disarmament, 1945-1959, II, 1595.

significant part of the territory of the Soviet Union, as well as other countries in Eastern Europe."¹ (See Map 2.) In addition, the proposals provided for ground observation posts and mobile inspection teams and called for the establishment of a working group of experts to examine the technical details of an inspection system to prevent surprise attack.

In response, the Russian representative refused to enlarge the inspection zones noted in the Soviet memorandum of April 30 and criticized those described by Secretary Dulles on August 2 for not including Western bases in Turkey, Pakistan, and Japan, and other countries near the Soviet Union.

Thus although important areas of consensus did emerge from the negotiations (e.g., on the partial measures approach to disarmament, on the principle of reciprocal aerial inspection, on the principle of a controlled nuclear test ban, and on first stage force reductions), the fundamental East-West divergences remained. As if to signal the breakdown of the deliberations, Mr. Zorin on August 27 suddenly abandoned the tactful, conciliatory approach he had used up to that point and delivered a scathing denunciation of Western policies and the Subcommittee in general.² Attacking the makeup of the Subcommittee and the secrecy of its meetings, he intimated that the forum of the negotiations should be transferred to the General Assembly.

¹"Western Working Paper. . . , August 2, 1957," in ibid., p. 838.

²U. N. Document DC/SC.1/65/Rev. 1, August 27, 1957, in ibid., pp. 849-868.

Two days later the Western Four, with the concurrence of the fifteen-nation NATO Council, submitted a detailed overall plan for first stage disarmament that tied up into an "inseparable" package all of the proposals they had previously suggested.¹ This placed the Soviet Union in the position of having to accept in toto Western policies on reductions of conventional forces, a "cutoff" of the production of fissionable materials for weapons use, the suspension of nuclear tests, and aerial and ground inspection in order to achieve any kind of a formal agreement. Clearly, the Western asking price for an international agreement had gone up considerably between May and August due, among other things, to the discrediting of Harold Stassen and the "soft line" approach that he espoused.

As expected, Zorin declared the Western plan to be entirely unacceptable to the Soviet Union. It was probably not a coincidence that the renewal of Russian intransigence came in the period of spectacular Soviet achievements in outer space--the successful testing of an ICBM on August 26 and the orbiting of the first Sputnik on October 2.

In view of the negative Soviet attitude, the Subcommittee at its 157th meeting on September 6 adopted its fifth report to the Disarmament Commission and adjourned sine die without reaching agreement to reconvene later.² Indeed, no further negotiations took place until the West agreed

¹"Western Working Paper Submitted to the Disarmament Subcommittee: Proposals for Partial Measures of Disarmament, August 29, 1957," U. N. Document DC/SC.1/66, in ibid., pp. 868-874.

²U. N. Document DC/112, September 11, 1957, in Cmd. 333 (1957), pp. 77-142. A fourth report was adopted on August 1, 1957. U. N. Document DC/112, August 1, 1957, in Cmd. 333 (1957), pp. 23-76.

the following year to break up its package proposal and to discuss some of its provisions separately.

Starting up the negotiations again proved to be a Herculean task, however, because the Soviet Union repudiated the framework in which they had been carried on since 1953, and there was no consensus on an alternative forum. On October 28, 1957, the Soviet Union introduced a draft resolution in the General Assembly that would have replaced the Disarmament Commission and Subcommittee of Five with a commission composed of the entire membership of the United Nations (then 82 nations).¹ This was rejected by the First Committee (political committee of the whole) on November 6 by a 3-51-21 vote. The General Assembly instead adopted a resolution adding 14 states to the Disarmament Commission for 19 C.² Albania proposed, as a compromise acceptable to the Russians, that seven other states (Austria, Bulgaria, Finland, Ceylon, Indonesia, Rumania, and the Sudan) be added to the fourteen countries named in the majority plan. This amendment was rejected, and the Soviet Union made good its threat to boycott the Disarmament Commission. Even though the General Assembly acquiesced to the Russian demand a year later and expanded the Commission to include all of the members of the United Nations, it has failed to function again except for a few purely procedural meetings.³ Indeed,

¹U.N.Document A/C/.1/797, October 28, 1957, in Documents on Disarmament, 1945-1959, II, 904-906.

²General Assembly Resolution 1150 (XII), November 19, 1957, in ibid., pp. 916-917. Approved by a vote of 60-9-11. Added to the Disarmament Commission were Argentina, Australia, Belgium, Brazil, Burma, Czechoslovakia, Egypt, India, Italy, Mexico, Norway, Poland, Tunisia, and Yugoslavia.

³General Assembly Resolution 1252 (XIII), November 4, 1958, in ibid., p. 1216.

not until 1962 did any of the disarmament negotiations again take place under the direct sponsorship of the United Nations.

In summary, the disarmament negotiations of the Subcommittee of Five stand out as the most serious attempt yet by both sides to come to terms on an implementable agreement. This change in the atmosphere of the disarmament talks came in the period following Stalin's death during which the Russians adopted a much more flexible negotiating posture on a number of questions, including disarmament. For the most part, however, the United States treated the "compromise proposals" of the Soviet Union with skepticism and was reluctant to negotiate in detail on them.

The Anglo-French Plan of June, 1954, for phased arms reductions, leading eventually to the prohibition of nuclear weapons, provided a general framework for disarmament which was accepted by the Soviet Union in May, 1955. Later, in September, 1955, the United States officially repudiated this comprehensive approach on the grounds that the elimination of nuclear weapons was not technically verifiable. Thereafter, the negotiations emphasized mainly confidence-building projects, such as the prevention of surprise attack, and first-stage arms reductions. Although the talks identified several areas of agreement, they collapsed in September, 1957, shortly after the Western powers tabled a "package proposal" linking measures that were acceptable to the Soviet Union to others that were not. These areas of agreement, however, carried over into the next phase of the disarmament deliberations, to which we now turn.

CHAPTER V

THE RECORD OF THE NEGOTIATIONS, 1958-1962

During the period from 1958 to 1962, the disarmament negotiations followed two separate tracks. There were, first of all, a series of specialized conferences dealing with two narrow-gauge measures--surprise attack prevention and a nuclear test ban. This track was a logical extension of the work of the Subcommittee of Five on partial or confidence-building steps toward disarmament. Then, secondly, there were the general conferences of 1960 and 1962 which were concerned primarily with the negotiation of a broad-gauge disarmament treaty. In effect, they took up where the comprehensive negotiations left off in 1955 at the time of the Geneva summit meeting when Western leaders began to press for agreement on "gateway" measures to create the political climate necessary for disarmament.

These two negotiating frameworks provide an interesting contrast. By and large, the general negotiations have been treated as a propaganda contest, with each side trying to outdo the other in the amount of disarmament it supports.¹ On the other hand, the specialized conferences to a much greater extent have addressed themselves to the concrete

¹ Laurence W. Martin, "Disarmament: An Agency in Search of a Policy," Reporter, XXIX (July 4, 1963), 24.

substantive issues that ultimately will have to be resolved if arms control is to be translated from theory into reality. For that reason, they will be analyzed in greater detail in this chapter.

Phase IV: The Specialized Conferences (1958-1962)

The Geneva Technical Conference on Surprise Attack November 10-December 18, 1958

"When it convened in Geneva on November 10, 1958, the Surprise Attack Conference¹ was more or less foredoomed to failure by a disagreement between the Soviet Union and the United States over what the scope of the discussions should be.² The American delegation, consisting of some fifty technical experts and advisers, went to Geneva prepared to discuss only strictly technical questions, that is, to "examine the

¹Technically designated as the "Conference of Experts for the Study of Possible Measures Which Might Be Helpful in Preventing Surprise Attack and for the Preparation of a Report Thereon to Governments." The report of the Conference, along with all of the documentary materials submitted, is available in U.N., General Assembly, Report of the Conference of Experts for the Study of Possible Measures Which Might Be Helpful in Preventing Surprise Attack and for the Preparation of a Report Thereon To Governments, U. N. Document A/4078, January 5, 1959. The participating states were: America, Britain, Canada, France, and Italy; Russia, Albania, Czechoslovakia, Poland, and Rumania.

²This conference grew out of a proposal in a letter by President Eisenhower to Premier Bulganin on January 12, 1958. He suggested that joint Russian-American technical studies on guaranteeing against the possibility of surprise attack be undertaken "without commitment as to ultimate acceptance . . . of the propositions involved. Documents on Disarmament, 1945-1959, II, 940. In tracing the evolution of the decision to schedule the meeting, see American communications addressed to the Soviet Union on July 31, 1958, in ibid., pp. 1087-1090; October 10, 1958, in ibid., pp. 1145-1146; November 7, 1958, in ibid., pp. 1219-1220; and Soviet communications addressed to the United States on July 2, 1958, in ibid., pp. 1084-1087; September 15, 1958, in ibid., pp. 1129-1131; November 1, 1958, in ibid., pp. 1213-1214; November 10, 1958, in ibid., p. 1222.

methods and objects of control and to assess the results that might be obtained from the adoption of those methods in lessening the danger of surprise attack."¹ The Soviet delegation, in contrast, was headed by a political representative (Kuznetsov) and was prepared to make recommendations "on measures for prevention of a surprise attack in conjunction with certain steps regarding disarmament."²

Consequently, each delegation placed its position on record but was unwilling to enter into a detailed discussion of the proposals of the other side. The Western governments, for their part, submitted six technical papers dealing with various aspects of the problem of surprise attack: a paper listing in tabular form the characteristics of the various delivery systems (rockets, long-range aircraft, and so on) that could be used in launching a surprise attack and the types of evidence in each case that would be useful in detecting preparation for an attack;³ a general survey of some of the methods of observing and inspecting the instruments of surprise attack, including aerial, satellite, ground, and underwater techniques;⁴ three descriptions of hypothetical

¹ "Note from the American Embassy to the Soviet Foreign Ministry Regarding Surprise Attack Negotiations, October 10, 1958," in *ibid.*, p. 1145. For the agenda proposed for the Conference by the Western countries see *ibid.*, p. 1223.

² "Draft Agenda Proposed by the Soviet Bloc Delegations at the Geneva Surprise Attack Conference, November 11, 1958," in *ibid.*, p. 1224. Italics added.

³ Conference Document GEN/SA/4, November 18, 1958, in *ibid.*, pp. 1230-1243.

⁴ Conference Document GEN/SA/5, November 19, 1958, in *ibid.*, pp. 1244-1255.

systems for observation and inspection of long-range aircraft,¹ ballistic missiles,² and ground forces;³ and a summary paper entitled "An Explanatory Statement Regarding Certain Factors Involved in the Planning of an Integrated Observation and Inspection System for Reducing the Possibility of Surprise Attack."⁴

The Soviet bloc, on the other hand, presented four proposals involving not primarily matters of technical detail but fundamental political decisions beyond the scope of the instructions of the Western representatives. Under the first proposal, the Conference of Experts would have recommended "that the Governments whose experts participate in the Conference, undertake not to carry out flights of aircraft with atomic and hydrogen weapons over the territories of foreign states and over the open seas."⁵

The other three papers outlined a plan for surprise attack prevention that essentially duplicated the Soviet proposals of November 17,

¹Conference Document GEN/SA/6, November 24, 1958, in ibid., pp. 1255-1264.

²Conference Document GEN/SA/9, December 3, 1958, in ibid., pp. 1275-1284.

³Conference Document GEN/SA/10, December 5, 1958, in ibid., pp. 1284-1297.

⁴Conference Document GEN/SA/12, December 17, 1958, in ibid., pp. 1306-1316.

⁵Conference Document GEN/SA/3, November 17, 1958, in ibid., p. 1227. This was a carryover from an unsuccessful Soviet campaign in the Security Council to have a resolution passed requesting the United States to refrain from sending its aircraft over the Arctic regions in the direction of Soviet frontiers when its warning network detected unidentified flying objects. (See Yearbook of the United Nations, 1958, pp. 16-18.)

1956, and April 30, 1957, except for the addition of Turkey, Iran, Japan, and Okinawa to the aerial inspection zones.¹ They went beyond the usual equivocal statements of Russian policy on inspection and control, however, and for the first time spelled out the specific details of the Soviet approach to safeguards against surprise attack. Linking the danger of an imminent surprise attack with large concentrations of conventional forces (in contrast to the Western fear of a sudden attack by ballistic missiles or long-range aircraft), the Soviet scheme called for the establishment of ground control posts at strategic "crossroads" --at railway junctions, major ports, and on main roads (but not at airfields). These posts would be set up at agreed points throughout the Territory of Belgium, France, the Netherlands, Luxembourg, Italy, the Federal Republic of Germany, the German Democratic Republic, Czechoslovakia, Poland, Hungary, Rumania, Bulgaria, Albania, Greece, Turkey, and Iran, and in "the western frontier zones of the Soviet Union and along the east coast of the United States." Twenty-eight ground control posts would be established in Warsaw Pact countries (including six on Russian territory) and fifty-four in NATO and Baghdad Pact countries (including six on American territory).

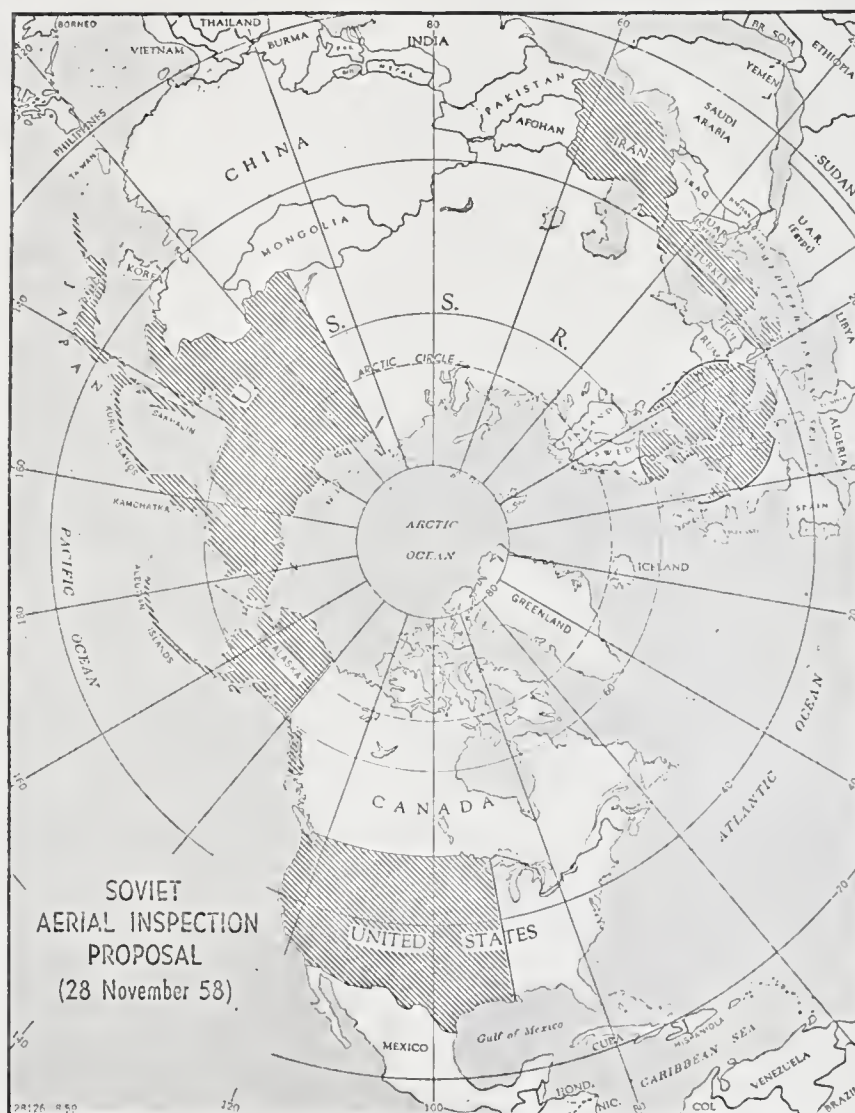
¹"Declaration Submitted by the Soviet Government at the Geneva Surprise Attack Conference: Measures for Preventing Surprise Attack, November 28, 1958," Conference Document GEM/SA/7/Rev. 1, in Documents on Disarmament, 1945-1959, II, 1264-1272; "Soviet Bloc Proposal at the Geneva Surprise Attack Conference: The Establishment of Ground Control Posts, the Taking of Aerial Photographs, and the Putting into Operation Simultaneously of a Number of Disarmament Measures To Reduce the Danger of Surprise Attack, November 28, 1958," Conference Document GEM/SA/8, Rev. 1, in ibid., pp. 1273-1275; "Soviet Bloc Proposal at the Geneva Surprise Attack Conference: The Tasks and Functions of Ground Control

In addition, an aerial inspection zone would be authorized in an area 300 kilometers on both sides of the line dividing the two Germanies, as well as in Greece, Turkey, and Iran. A second aerial inspection zone in the Far East would include the territory of the Soviet Union east of 108 degrees east longitude and the territory of the United States west of 90 degrees west longitude, plus all of Japan and Okinawa. (See Map 3.)

Concerning the operation of ground and aerial inspection, each control post would be staffed by six or eight control officers divided equally between the nationals of the NATO-Baghdad Pact countries and those of the Warsaw Pact states. The post commander, however, was to be a national of the country being inspected. Similarly, air groups (one for Warsaw Pact members and one for NATO-Baghdad Pact members) containing "representatives of the other side" would photograph their own territory and the pictures would be processed, interpreted, and studied at a photography center with a staff equally divided between the nationals of both sides. Moreover, in conformity with the Soviet philosophy of linking any kind of control arrangement with disarmament, the implementation of aerial and ground inspection was conditioned upon acceptance of, first, a reduction of foreign armed forces in the proposed European control zone by at least one-third, and, second, a ban on the stationing of nuclear weapons and rockets in East and West Germany.

Of all these proposals, the one with potentially the most far-

Posts and Aerial Inspection, December 12, 1958," Conference Document GEN/SA/11, in ibid., pp. 1298-1302.



Map 3 -- Soviet Aerial Inspection Proposal (November 28, 1958). Documents on Disarmament, 1945-1959, II, 1599.

reaching implications was the provision for "crossroads" inspection, an idea first broached by the Russians in 1955 and periodically revived by them since then. Even though this was perhaps the most meaningful concession the Russians have come forward with in the postwar negotiations, the United States, strangely enough, has persistently failed to follow it up and thoroughly explore the possibility of a separate agreement embodying this principle.

Ironically, while the Soviet delegation to the Surprise Attack Conference was willing to talk about inspection and control in much more clear and precise terms than in any previous negotiations, the Western representatives were unable to counter with any positive proposals or even to probe the Soviet position since it touched on matters beyond the scope of their instructions. So on the initiative of William C. Foster, the chief American spokesman, the Conference adjourned on December 18 at its thirtieth meeting without setting a time to reconvene even though the Soviet bloc wanted to continue the talks.

The Geneva Conference on the Discontinuance of Nuclear Weapon Tests
October 31, 1958-January 29, 1962

Nuclear-weapon testing did not become an issue in the disarmament negotiations until the second decade of the atomic age, after the invention of the hydrogen bomb. In April, 1954, after an intensive series of thermonuclear tests by the United States in the Pacific Ocean area, Prime Minister Nehru petitioned the Disarmament Commission and its Subcommittee to consider a "standstill agreement" on testing "even if arrangements about the discontinuance of production and stockpiling must

await more substantial agreements among those principally concerned."¹ No doubt primarily because of the state of their weapons development programs, neither the West nor the Soviet Union reacted enthusiastically toward the Indian proposal.² Neither side, in fact, was willing to bring it up in the Subcommittee negotiations.

But the movement to ban nuclear testing, fanned not only by the desire to check the arms race but also by mounting fears of the harmful effects of radioactive fallout produced by nuclear explosions, slowly gained momentum and reached a fever pitch in 1958. The Russians were quick to respond to this world-wide apprehension. In May, 1955, they called for a discontinuance of testing atomic and hydrogen weapons "as one of the first measures" in the execution of a disarmament program.³ But the following November they for the first time urged a separate agreement "on the cessation of experiments with all types of nuclear weapons" as a first step toward the prohibition of this class of

¹ U. N. Document DC/44, April 8, and Corr. 1, April 9, 1954, in ibid., I, 410.

² The United States and the Soviet Union exploded experimental thermonuclear devices in November 1952 and August 1953, respectively. But a hydrogen bomb was not actually detonated in an air drop until November 23, 1955, by the Soviet Union and May 21, 1956, by the United States. Arnold Kramish, Atomic Energy in the Soviet Union (Stanford, Calif.: Stanford University Press, 1959), pp. 125, 127, cited by Nogee, Soviet Policy Toward International Control of Atomic Energy, p. 206. Also the British had underway a project to develop their own thermonuclear weapon (successfully tested on May 15, 1957) and the French were working to develop their own atomic bomb (successfully tested on February 13, 1960).

³ "Soviet Proposal Introduced in the Disarmament Subcommittee . . . , May 10, 1955," in Documents on Disarmament, 1945-1959, I, 462. *Italics added.*

weapons.¹ On March 27, 1956, they formally proposed that the nuclear powers agree to "discontinue forthwith tests of thermonuclear weapons" independently of any settlement of the general problem of disarmament.² Such a pact would be uncomplicated, according to the Soviet Union, because "it would not in itself require any international control agreements, for the present state of science and engineering makes it possible to detect any explosion of an atomic or hydrogen bomb, wherever it may be set off."³

The Western allies, as we have seen, at first disputed both of the major premises of Soviet policy. They required that a cessation of nuclear tests be linked with a cutoff of the production of fissionable materials for nuclear weapons and the installation of an international control system. The Soviet Union, however, in principle removed the second ground for Western objections to stopping tests by agreeing on June 14, 1957, to accept controls.⁴ This placed the United States

¹ U. S., Department of State, Geneva Conference on the Discontinuance of Nuclear Weapon Tests: History and Analysis of Negotiations, Department of State Publication No. 7258 (Washington: U. S. Government Printing Office, 1961), pp. 4-5. (Cited hereafter as Geneva Conference.)

² "Soviet Proposal Introduced to the Disarmament Subcommittee. . . , March 27, 1956," in Documents on Disarmament, 1945-1959, I, 607.

³ Letter from Bulganin to Eisenhower, September 11, 1956, in ibid., p. 692.

⁴ "Soviet Proposal Introduced in the Disarmament Subcommittee: Cessation of Atomic and Hydrogen Weapons Tests, June 14, 1957," U. N. Document DC/SC.1/60, July 29, 1957, in ibid., II, 791.

Britain, and France in the most vulnerable position they had ever occupied in the postwar negotiations. For even though, as the United States insisted, the heart of the problem lay in the control of nuclear weapons rather than simply in the testing of them, the Soviets could argue persuasively that by linking the two matters the West was trying to prevent the conclusion of an agreement.

A second Soviet maneuver on March 31, 1958, brought more pressure on the United States to alter its opposition to halting the testing of nuclear weapons without any limitation on the production of them. Immediately after completing a large series of tests, the Soviet Government declared that it was unilaterally discontinuing all further nuclear weapon tests provided other nations followed suit.¹ President Eisenhower, however, refused to second the move of the Soviet Union and instead renewed his proposal for the study by East-West technical groups of specific control measures for a broad disarmament agreement under which nuclear testing would be limited or suspended.²

Khrushchev, who replaced Bulganin as Premier on March 27, 1958, at first refused and then agreed reluctantly on May 9 "to have both sides designate experts who would immediately begin a study of methods for detecting possible violations of an agreement on the cessation of nuclear

¹"Decree of the Supreme Soviet Concerning the Discontinuance of Soviet Atomic and Hydrogen Weapons Tests, March 31, 1958," in *ibid.*, pp. 978-980.

²The proposal was originally advanced by President Eisenhower in a letter to Premier Bulganin on January 12, 1958. *Ibid.*, pp. 932-941. See also Letter from Eisenhower to Khrushchev, April 8, 1958, in *ibid.*, pp. 982-985; Letter from Khrushchev to Eisenhower, April 22, 1958, in *ibid.*, pp. 996-1004; Letter from Eisenhower to Khrushchev, April 23, 1958, in *ibid.*, pp. 1006-1007.

tests."¹

From July 1 to August 21, 1958, a Conference of Experts² from the United States, the United Kingdom, France, and Canada on one side, and the Soviet Union, Czechoslovakia, Poland, and Rumania on the other, held thirty formal sessions in Geneva.³ It produced a unanimous report, thereby becoming the first postwar arms control conference to reach agreement.⁴ The scientists came to the conclusion that technically "the methods of detecting nuclear explosions available at the present time . . . make it possible, within certain limits, to detect and identify nuclear explosions. . . ."⁵

Specifically, they recommended as a feasible system a world-wide network of 160 to 170 land-based control posts and ten ship-based control posts. The approximate distribution of the land-based control posts would be as follows: twenty-four in North America, six in Europe, thirty-seven in Asia, seven in Australia, and sixteen in South America. These stations, each with a staff of about thirty experts, would be

¹Letter from Khrushchev to Eisenhower, May 9, 1958, in ibid., p. 1038.

²Technically known as the Geneva Conference of Experts to Study the Possibility of Detecting Violations of a Possible Agreement on the Suspension of Nuclear Tests.

³Note that a pattern was being set for equality of representation of Western and Soviet bloc countries in future disarmament negotiations.

⁴"Communiqué and Report of the Conference of Experts To Study the Possibility of Detecting Violations of a Possible Agreement on the Suspension of Nuclear Tests, August 21, 1958," in ibid., pp. 1090-1111.

⁵Ibid., pp. 1090-1091.

equipped with apparatus for identifying the phenomena caused by nuclear detonations, such as sound waves, earth shock waves, radio pulses, optical and gamma radiation, and radioactive debris. To augment the ground posts, aircraft would carry out regular flights over the peripheries of the oceans for the purpose of air sampling and would be used to investigate suspicious events.

It was the consensus of the Conference of Experts that the proposed control apparatus would have a good probability of detecting atmospheric and deep-sea nuclear explosions down to about one kiloton yield, or about one-twentieth of the explosive force of the bomb dropped on Hiroshima. Explosions at an altitude of from six to thirty-one miles could probably be detected but not always identified. (Extra-terrestrial nuclear explosions were not considered by the Conference.) Based on the evidence of the sole American underground nuclear test up to that time (the Rainier shot in the fall of 1957), it was estimated that the recommended control system would be able to detect and identify about 90 per cent of all underground disturbances equivalent to a five kiloton yield or above. That is, it would be 90 per cent effective in determining, through seismological evidence alone, whether a nuclear explosion or an earthquake had taken place. Hypothetically, that would leave 20 to 100 seismic signals per year that could not be identified. In cases where these unidentified seismic events were suspected of being nuclear explosions, inspection teams would be sent to the site where they occurred in order to make a positive determination of their origin.

On August 22, 1958, President Eisenhower promptly endorsed the

technical conclusions of the Conference of Experts and proposed that the three nuclear powers negotiate a test-suspension treaty based on the control system that was recommended.¹ He also expressed the willingness of the United States to suspend further testing of nuclear weapons on a year-by-year basis of reciprocity provided, first, that "the agreed inspection system is installed and working effectively"; and, second, that "satisfactory progress is being made in reaching agreement on and implementing major and substantial arms control measures such as the United States has long sought."²

After a period of intergovernmental correspondence, delegations from the Soviet Union, the United States, and Great Britain met in Geneva on October 31, 1958, for what was planned to be two or three weeks of discussions. The Conference however, lasted thirty-nine months and held 353 meetings before finally collapsing on January 29, 1962.³

¹"Statement by President Eisenhower: Experts' Report on Detection of Nuclear Tests, August 22, 1958," in ibid., pp. 1111-1112.

²Ibid., p. 1112. Subsequently, on January 19, 1959, the United States and the United Kingdom dropped the link between the continuation in force of a negotiated test ban and progress toward general disarmament. Henceforth, the sole condition required by the Western powers for the conclusion of an agreement on the cessation of nuclear testing was Soviet acceptance of effective controls. Geneva Conference, pp. 29-30.

³New York Times, January 30, 1962. The Conference was actually in session during the following periods: October 31-December 19, 1958; January 5-March 19, 1959; April 13-May 8, 1959; June 8-August 26, 1959; October 27-December 19, 1959; January 12-April 14, 1960; April 25-May 12, 1960; May 27-August 22, 1960; September 27-December 5, 1960; March 21-September 9, 1961; November 28-December 21, 1961; January 16-January 29, 1962. Compiled from William J. Gehron, "Geneva Conference on the Discontinuance of Nuclear Weapon Tests: History of Political and Technical Developments of the Negotiations from October 31, 1958, to August 22, 1960," U. S. Department of State Bulletin, XLIII (September 26, 1960), 482-497, and Facts on File, 1960-1962.

The first weeks of the discussions were taken up by a procedural debate over the agenda of the Conference--a familiar point of contention throughout the negotiations since 1946. The Soviet Union wanted the Conference to agree first to a permanent cessation of tests and then to conclude a separate "protocol" setting up a control system.¹ Conversely, the Western delegations insisted that the examination of the control organization should be the first item on the agenda, with the actual drafting of the agreement on the suspension of tests as the second item. After a month-long deadlock, the Soviet delegate, Semyon Tsarapkin, yielded to the British-American point of view and agreed to proceed with a discussion of the means of control.

On December 8, 1958, the initial Soviet proposal on controls for policing a test ban was tabled.² Under it, the control organization would have been operated directly by a Commission (composed of Russia, the United States, and Britain) with jurisdiction over the technical control system (laboratories, ground and ship control posts, and specially equipped aircraft for collecting samples of radioactive debris). Decisions on "important" questions, such as whether sufficient evidence existed to warrant an on-site inspection of a suspicious event, would necessitate the approval of all three powers. Moreover, the staff members of each control post, including the director, would be nationals

¹"Soviet Draft Agreement on the Cessation of Atomic and Hydrogen Weapon Tests, October 31, 1958," Conference Document DNT/1, in Geneva Conference, pp. 313-314.

²"Soviet Proposal for a Control Organization, December 8, 1958," Conference Document DNT/19, in ibid., pp. 315-322.

of the country on whose territory the station was situated with the exception of one or two control officers from the "other side." The "foreign" control officer could observe but not actively participate in the operations of the control post. Likewise, inspection teams, to be organized on an ad hoc basis when needed for making on-site checks, would also be composed of the nationals of the country to be inspected.

Ambassador Wadsworth, speaking for the United States, outlined a more complicated organizational framework designed to fulfill three essential principles of a satisfactory control arrangement: decision-making by a majority vote; international rather than national operation of the detection and identification system; and the minimization of the number of political decisions required in the day-to-day operation of the control organization.¹ He suggested a three-part structure: first a conference of Parties to the agreement to periodically review the general operation of the system; a Control Commission made up of the three nuclear powers plus a small number of non-permanent members, to be responsible for broad policy making (installing, operating, and improving the data-gathering facilities, authorizing nuclear detonations for peaceful purposes, and so on); and an administrator responsible to the Control Commission, to direct the detailed activities of the organization and to

. . . determine, subject to the approval of the Commission, the equipment, construction, and location of control posts and other facilities, select and train personnel for the

¹"Statement by Ambassador Wadsworth, December 11, 1958," in ibid., p. 26.

manning of such facilities, . . . make technical findings from the data so collected, despatch special flights and analyze the results which they obtain.¹

From the start the Soviet Union had misgivings about entrusting the operation of the control agency to an Administrator. But on American and British assurance that the administrative officer would act under the directives of the Control Commission, the Russian representative gave his agreement to this concept. Thus the way was cleared for the adoption of the first four articles of the draft treaty before the Christmas recess.² These articles provided for the permanent discontinuance of nuclear weapon tests; the establishment of a Control Commission (with the United States, the United Kingdom, and the Soviet Union as permanent members and four other states elected by the Conference); a single Administrator; a Detection and Identification System; and a Conference of Parties to the agreement.

The agreement between the Soviet Union and the West on the general institutional framework for administering a test ban treaty, in itself a sizable accomplishment, was overshadowed, however, by intractable political and technical problems. In addition to stubborn disagreement on the key political issues of the voting procedure in the Commission, on-site inspections, and the staffing of the control posts, it developed that the verification of compliance with a total test ban was

¹"Statement by Ambassador Wadsworth, December 2, 1958," in *ibid.*, p. 24.

²See "Agreed Parts of the Draft Treaty on the Discontinuance of Nuclear Weapon Tests, 1960," in *ibid.*, pp. 437-439.

technically more complicated than previously believed. The United States on January 3, 1958, submitted new data from its underground tests in October, 1958, which revealed that underground nuclear explosions could not be distinguished from earthquakes as readily as the Conference of Experts had anticipated.¹ American scientists, in fact, calculated that with the network of control posts and the equipment proposed at Geneva, the number of earth shocks equivalent to a five kiloton explosion, or greater, that could not be identified by seismic means alone would be approximately 1500 per year.² On the other hand, it was estimated that the Geneva system could probably identify about 90 per cent of all seismic events above a 20 kiloton yield as natural earthquakes--the same degree of efficiency predicted by the Conference of Experts for explosions above a 5 kiloton yield. Even then, the detection of clandestine underground testing would by no means be assured, for it was discovered that by detonating a nuclear device in a large underground cavity (a technique known as "de-coupling") the seismic signal emitted could be reduced below an identifiable level.³

¹U. S. Working Paper on the New Seismic Data, January 3, 1958, in ibid., pp. 331-334.

²"Findings of the Berliner Panel on Seismic Improvement, March 10, 1958," in ibid., p. 337.

³For example, the detonation of a nuclear charge of about 20 kilotons embedded in a layer of volcanic rock would produce a seismic signal in the range of 4.75 magnitude. But if it were exploded in a vast cavity in hard rock, "seismic signals might be reduced by as much as a factor of 100." U. S., Department of State, The Nuclear Test-Ban Treaty: Gateway to Peace, Department of State Publication No. 7254 (Washington: U. S. Government Printing Office, 1961), p. 17.

Thus given the state of the science of detecting violations, a controlled ban on all nuclear tests was simply not feasible. With this in mind, President Eisenhower on April 13, 1959, attempted to salvage something from the negotiations by proposing a prohibition on nuclear weapons tests in the atmosphere up to an altitude of fifty kilometers, which could be satisfactorily monitored by a simplified control system.¹ The discontinuance of testing in other environments (underground, underwater, and outer space) could be incorporated into the proposed treaty phase by phase as soon as the essential control measures were agreed upon.

Chairman Khrushchev rejected the concept of a partial test ban and insisted that the search for agreement on a comprehensive treaty prohibiting all tests should continue.² Toward accomplishing that end, he opened two new avenues for exploration in the negotiations. First, to overcome the deadlock over the question of on-site inspections of unidentified seismic events, he accepted the suggestion proffered by Prime Minister Macmillan that the Soviet Union and the West allow a predetermined annual quota of veto-free inspections. "In those cases where the indications of the instruments of control posts provide a basis for suspecting a phenomenon of being a nuclear explosion," inspection teams

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Letter from Eisenhower to Khrushchev, April 13, 1959, in Documents on Disarmament, 1945-1959, II, 1392-1393; letter from Eisenhower to Khrushchev, May 5, 1959, in ibid., pp. 1403-1404.

2

Letter from Khrushchev to Eisenhower, April 23, 1959, in ibid., pp. 1396-1398; Letter from Eisenhower to Khrushchev, May 5, 1959, in ibid., pp. 1403-1405.

would be sent out upon the request of the other side within the limits of the agreed number of visits.¹ Subsequently, however, the Russians placed two stringent limitations on this proposal. On February 16, 1960, it specified that in order to be eligible for inspection the location of a suspicious underground disturbance with few exceptions would have to be pinpointed within an area of 200 square kilometers (about 75 square miles) by the seismographs.² (The United States calculated that the area eligible for inspection should cover either 200 or 500 square kilometers, depending on whether data was obtained from a sufficient number of control posts to establish the location of the earth shock precisely.³ In addition, on July 26, 1950, the Soviet Union set three as the number of on-site inspections annually for each of the three negotiating countries after refusing for more than a year to give any specific figures.⁴

Second, Khrushchev expressed the willingness of the Soviet Union to engage in technical discussions on methods of controlling high altitude nuclear explosions--an area of inquiry not covered by the Conference

¹Letter from Khrushchev to Eisenhower, May 14, 1959, in ibid., p. 1410.

²"Statement by the Soviet Representative (Tsarapkin) at the Geneva Conference on the Discontinuance of Nuclear Weapon Tests, February 16, 1960," in U. S., Department of State, Documents on Disarmament, 1960, Department of State Publication No. 7172 (Washington: U. S. Government Printing Office, 1961), p. 43. (Cited hereafter as Documents on Disarmament, 1960)

³A circular area of 500 square kilometers would have a radius of approximately 12.5 kilometers.

⁴"Statement by the Soviet Representative (Tsarapkin) at the Geneva Conference on the Discontinuance of Nuclear Weapon Tests, July 26, 1960," in ibid., p. 173.

of Experts in 1958. Experts from the United States, the United Kingdom, and the Soviet Union accordingly met at Geneva from June 22 to July 10, 1959. They recommended: (1) a system of five or six earth satellites in orbits of more than 30,000 kilometers equipped for the detection of gamma rays, neutrons, and soft X-rays; (2) a satellite with an electron counter placed around the earth in an orbit that would allow the detection of trapped electrons; (3) a system of four satellites in appropriate solar orbit; and (4) additional ground equipment to aid in the detection of space tests.¹

Although the Soviet Government readily agreed to incorporate the recommended controls for high altitude explosions into the system designed by the Conference of Experts in 1958, it was reluctant to consider other modifications of the Geneva system proposed by the United States. Finally on November 3, 1959, ten months after the data from the American underground nuclear tests in the fall of 1958 was submitted to the conference in Geneva, the Soviets agreed to the convening of a technical working group to study the problems involved in the detection of underground nuclear testing. The group met from November 25 to December 18, 1959, in twenty-one private sessions but failed to agree on any modifications of the technical conclusions of the 1958 Conference of Experts.²

¹"Report of the Technical Working Group on the Detection and Identification of High-Altitude Explosions, July 10, 1959," Conference Document DNT/63, in Geneva Conference, pp. 373-374.

²"Report of Technical Working Group II on Seismic Problems, December 18, 1959," Conference Document DNT/TWG. 2/9, in ibid., pp. 384-413. For the views of the American delegation who participated in the working

Specifically, the Soviet delegation disputed the American contention that seismic signals produced by earthquakes and explosions could not be distinguished as easily as formerly believed; that earthquakes equivalent to explosions of a given yield were about double the number estimated by the experts in 1958; and that the seismic signal of an explosion could be reduced by detonating it in a large underground cavity. In short, they rejected any finding which scaled down the estimated capability of the Geneva system for detecting and identifying underground nuclear explosions.

Despite the failure of the Western powers and the Soviet Union to reach an accommodation on the thorny question of inspection and control, they managed to agree on thirteen articles, a preamble, and an annex to the draft treaty during 1959.¹ The Conference had spelled out in full the mechanical details of a test ban arrangements. So further progress depended on the settlement of the substantive political issues at stake. The Soviet Union on December 14, 1959, proposed to break the log-jam of disagreement on the staffing of control posts, the composition of the Commission, and the voting procedure in the Commission on budgetary and financial questions.² If the United States and the United Kingdom agreed

group, see U. S., Congress, Senate, Disarmament Subcommittee of the Committee on Foreign Relations, Hearing, Technical Problems and the Geneva Test Ban Negotiations, 86th Cong., 2d Sess., 1960.

¹"Agreed Parts of the Draft Treaty on the Discontinuance of Nuclear Weapon Tests, 1960," in Geneva Conference, pp. 437-452.

²"Statement by Ambassador Tsarapkin, December 14, 1959," in ibid., pp. 377-384.

on a Commission with three seats assigned to the Soviet Union and its allies, three seats to the Western powers, and one seat to the neutral states, the Soviet Union, in return, would accept a formula for the staffing of control posts under which one-third of the technical specialists would be drawn from the nationals of each side. The remaining one-third would be divided equally between the allies of the United States and the United Kingdom, the allies of the Soviet Union, and the neutral countries. Moreover, the Soviet Union would consent to having the budget adopted by a two-thirds vote instead of requiring unanimity among the three nuclear powers.

The softening of the Russian position on the staffing of the control facilities focused attention more sharply on the major unresolved problem in the negotiations--the verification of compliance with a ban on underground testing. Because the two sides were so fundamentally at odds over the technical and political aspects of the question, the United States on February 11, 1960, once again put forth its proposal for a phased treaty providing for a cessation of nuclear weapon test explosions "in those environments where adequate control is possible under a control system acceptable to us all."¹ In the first phase of the agreement, tests would be discontinued in the atmosphere, in the oceans, in outer space "up to the greatest height with respect to which agreement can be reached on the installation of effective controls," and underground in the case of all explosions "down to the lowest limit of

¹"Statement by Ambassador Wadsworth, February 11, 1960," in ibid., p. 415.

size, or threshold, for which, in our judgment, adequate control is now feasible."¹

A seismic signal strength of 4.75 on the unified magnitude scale (corresponding, according to United States calculations, to a 19-kiloton yield)² was suggested as the threshold. Above this level of magnitude, it was estimated that about 100 seismic events would probably occur annually in the Soviet Union and in the United States and the United Kingdom, taken together. To check the possibility that these earth tremors may have resulted from underground nuclear explosions, the United States proposed that the opposite side be allowed to select 20 per cent of all of them for on-site inspections or 30 per cent of those that could not be identified conclusively as earthquakes. In either case, this would amount to about twenty on-site inspections annually on the territory of the Soviet Union, according to American scientists. Below the threshold of 4.75, no restrictions on testing would apply because of the unavailability of satisfactory methods for monitoring whether these restrictions were being observed by all parties.

The Soviet Union initially rejected the phased approach but on March 19, 1960, switched its position and agreed to a first-phase treaty banning tests in the atmosphere, the oceans, and outer space

¹ Ibid., p. 416.

² The Soviet experts participating in Technical Working Group II in December, 1959, estimated that an explosion of about a two kiloton yield would produce a seismic signal having a magnitude of about 4.75. "Report of Technical Working Group II on Seismic Problems, December 12, 1959," in ibid., p. 392.

and all underground tests above a seismic magnitude of 4.75.¹ This was contingent, however, on Western acceptance of a voluntary moratorium on tests below the threshold for a four or five year period during which a joint Soviet-Western seismic research program would be carried on to perfect workable controls for smaller underground explosions. Moreover, even if the program were unsuccessful, the moratorium would not be automatically lifted at the end of that period.

Responding to the Soviet move, President Eisenhower and Prime Minister Macmillan on March 29 issued a joint declaration after conferring at Camp David, Maryland.² They indicated that the United States and the United Kingdom were prepared to institute "a voluntary moratorium of an agreed duration" on nuclear weapons tests below the threshold as soon as the first-phase test cessation treaty was signed and arrangements were made for a coordinated research program to improve the methods of detecting underground explosions below the threshold.

The Soviet Union on May 3, 1960, officially endorsed the general approach taken by the Eisenhower-Macmillan declaration and offered "to proceed immediately to the preparation of a joint programme of research and experiments for the purpose of improving the system of control over underground nuclear explosions."³ At the same time Russia withdrew its

¹"Statement by Ambassador Tsarapkin, March 19, 1960," in ibid., pp. 420-423.

²"Joint Declaration by President Eisenhower and Prime Minister Macmillan, March 29, 1960," in ibid., pp. 423-424.

³"Statement by the Soviet Representative (Tsarapkin) at the Geneva Conference on the Discontinuance of Nuclear Weapon Tests, May 3, 1960," in Documents on Disarmament, 1960, pp. 83-86.

objection to the use of underground nuclear detonations as a part of experiments to improve seismological detection techniques if they were limited in number and carried out jointly to safeguard against their use for weapons development purposes. Shortly thereafter, the United States on May 7 announced its intention to begin Project VELA, a systematic research effort in seismology utilizing both chemical and nuclear explosions.¹ And from May 11 to May 30, a Seismic Research Program Advisory Group made up of scientists from America, Britain, and Russia met in Geneva to discuss plans for a cooperative research program involving the three countries. The Soviet delegation displayed a keen interest in this endeavor and noted that their government had already agreed "to provide necessary appropriations which are to be quite substantial."²

At this point, however, the relations between the United States and the Soviet Union deteriorated sharply. On May 1 an American U-2 plane crashed deep in the territory of the Soviet Union. Both the pilot and the plane fell into Russian hands, and the pilot was later tried and sentenced to a prison term for espionage. Meanwhile, Chairman Khrushchev refused to participate in a meeting of the Heads of Government of the Big Four, scheduled for May 16 in Paris, unless the United States, among

¹"White House Statement Regarding Research and Development Program on the Detection of Underground Nuclear Explosions, May 7, 1960," in ibid., pp. 86-87.

²U. S., Department of State, U. S. Participation in the UN: Report by the President to the Congress for the Year 1960, Department of State Publication No. 7341 (Washington: U. S. Government Printing Office, 1962), p. 4.

other things, apologized publicly to the Soviet Union and punished those responsible for the ill-fated U-2 flight.¹ Although the United States ordered these reconnaissance flights discontinued, it could not, of course, comply with Khrushchev's extreme demands, and the summit meeting was therefore scuttled.

In the negotiations at Geneva, the Russians on May 27 backed away from their offer to participate in a joint research program for improving the detection of underground nuclear explosions.² Ambassador Tsarapkin insisted that the Soviet Union fully accepted the conclusions of the 1958 Conference of Experts and thus felt it to be unnecessary to conduct experiments or research to improve the control system. The United States, on the other hand, could carry out a unilateral research program on its own territory, but Soviet scientists would have to participate in the detonation of any nuclear devices underground to make sure that they were not being used to improve weapons. On June 15 he declared that the Soviet Union must also be allowed to inspect the internal and external structure of any nuclear devices used for an underground experiment.³ The United States countered with a proposal that the three nuclear powers pool "a number of nuclear devices of older and militarily out-dated design."⁴ All three parties would then examine them and keep them under

¹ See "Radio and Television Address by President Eisenhower on the Collapse of the Paris Summit Conference, May 25, 1960," in Documents on Disarmament, 1960, pp. 88-96.

²Geneva Conference, pp. 101-102.

³Ibid., p. 103.

⁴Ibid., pp. 103-104.

"technical surveillance until detonated." The Soviet Union, however, refused to supply nuclear weapons to the pool, and negotiations on the research program and nuclear detonations for peaceful purposes reached an impasse.

Otherwise, in the period immediately following the blowup of the Paris summit conference, the Soviet Union did not draw back from the policy positions it had taken earlier. On July 26 the Russians proposed an annual quota of three on-site inspections for each of the three powers that could be used to check on underground disturbances above or below the 4.75 magnitude threshold suggested by the West. On August 11, they also agreed to the location of fifteen control posts on Soviet territory (two stations in European Russia and thirteen in Asiatic Russia).¹ Conversely, the United States and the United Kingdom insisted on the establishment of twenty-one control posts and the authorization of twenty on-site inspections annually in the Soviet Union.² Moreover, the two sides were split over the timetable for the installation of the control system. The Soviets contended that it would take four years to construct and equip the control posts so that they could detect and locate underground Earth shocks eligible for on-the-spot checking. The West disagreed and wanted to set up enough control posts to allow on-site inspection to start within at least two years after the treaty became effective. As neither side showed any willingness to yield on these key issues, the Conference recessed on December 3 to await a change of administration.

¹Ibid., p. 100.

²Ibid., p. 100.

in the United States.

When the meetings were resumed over three months later, on March 21, 1961, the negotiations reached a turning point. The new American representative, Arthur Dean, announced that the United States and the United Kingdom were prepared to make further concessions in order to meet some of the objections raised by the Soviet Union.¹ They now agreed to a three-year moratorium on underground tests below the threshold (in lieu of the twenty-seven month period they had supported previously) during which a program of seismic research would be carried out; Soviet inspection of the internal mechanism of nuclear devices used in seismic research or for peaceful purposes, on a reciprocal basis; a total ban on high altitude tests to be policed by the control apparatus recommended by Technical Working Group I in July, 1959; a reduction in the number of control posts proposed for the Soviet Union from twenty-one down to nineteen; the right of veto on the total budget but not on individual items; and an eleven-nation Control Commission composed of four Western states, four Soviet bloc states, and three neutrals.

At the same time, the two Western governments reaffirmed their belief that the heads of control posts and the staff of inspection teams should not be nationals of the host country. The United States also still considered twenty on-site inspections in the Soviet Union each year to be the minimum number that could be accepted. However, when

¹"Statement by Ambassador Dean, March 21, 1961," in ibid., pp. 465-475.

the Russian representative objected that American scientists had overestimated the number of unidentified seismic events occurring each year in the Soviet Union, Ambassador Dean offered a substitute formula on May 29 according to which there would be an annual minimum of twelve inspections plus one additional inspection (up to an annual maximum of twenty) for every five unidentified seismic events in excess of sixty such events located by the instruments of the control posts.¹

While the United States continued to resist the Soviet demand for an advance commitment not to resume small underground tests at the end of the moratorium, it did agree on August 28 to let a panel of scientists (four from the West, four from the Soviet bloc, and three from neutralist countries) prepare recommendations concerning the lowering of the treaty threshold below the 4.75 seismic magnitude after the seismic research program had been completed.² In a last ditch effort to come to terms with the Soviets, American test ban policy was loosened further to permit 50 per cent of the personnel in inspection groups to come from the non-aligned countries rather than totally from among the nationals of the opposite side.

These western concessions were cancelled out by a stiffening negotiating posture of the Soviet Union. On March 21 Ambassador Tsarapkin abandoned the idea of a single impartial administrator for the control system which the Russians had accepted reluctantly in December,

¹"Western Proposal for 'Sliding Scale' on On-Site Inspections, May 29, 1961," in ibid., pp. 537;538.

²"Statement by Ambassador Dean, August 28, 1961," in ibid., p. 573.

1958. He now proposed instead the creation of a three-member Administrative Council made up of one representative each from the West, the Soviet bloc, and the neutral states--an application, in other words, of the "troika principle" first proposed by the Soviets for the reorganization of the United Nations Secretariat.¹ For the first time he also injected into the negotiations the issue of French nuclear tests, implying that France might be testing nuclear weapons for the United Kingdom and the United States.

From that point on, the negotiations deteriorated steadily. At their Vienna meeting in June, Chairman Khrushchev urged President Kennedy to agree to a merger of the test ban talks with the negotiations on general and complete disarmament. This sharply reversed the Soviet strategy since 1956 of keeping the two matters separated.² Then in the wake of the East German move on August 13 to seal off East Berlin from West Berlin, the Russian government on August 30 announced its intention to resume the testing of nuclear weapons.³ On September, a two-month series of over forty nuclear tests was commenced.⁴ Eight days

¹"Statement by Ambassador Tsarapkin, March 21, 1961," in ibid., pp. 452-465.

²"Soviet Aide Memoire, June 4, 1961," in ibid., pp. 538-542.

³"Statement by Soviet Government on Decision to Carry Out Experimental Explosions of Nuclear Weapons, August 30, 1961," in ibid., pp. 606-618.

⁴"Nuclear Testing and Disarmament: Radio-Television Address by President Kennedy, March 2, 1962," in U. S., Arms Control and Disarmament Agency, International Negotiations on Ending Nuclear Weapon Tests, September 1961-September 1962, Arms Control and Disarmament Agency Publication No. 9 (Washington: U. S. Government Printing Office, 1962), p. 192. (Cited hereafter as International Negotiations.)

later the Geneva Conference went into recess while the General Assembly debated the test ban question.

When the negotiations were renewed on November 28, the Soviet Union took another retrograde step by tabling a draft agreement under which the parties would "solemnly undertake not to conduct tests of any kind of nuclear or thermonuclear weapons in the atmosphere, in outer space, or under water. Supervision would be limited to the use by states of their own national systems of detection.¹ Nationally controlled detection could be replaced by an internationally controlled system only as a part of an overall agreement on general and complete disarmament.

With the USSR adhering firmly to its proposals for a "troika" administrative council and self-inspection, the negotiations were hopelessly deadlocked. On January 29, 1962, at the 353rd meeting of the Geneva Conference, the United States switched its strategy by proposing the suspension of the test-ban talks and the referral of the test-ban question to the Eighteen Nation Committee, which was to begin its work on March 14th. Over the strenuous objections of the Soviet Union (which seemed illogical in view of the recent Russian insistence that a test ban could be worked out only within the larger framework of general disarmament), this action was taken. The Geneva Conference, more than three years after it began, ceased to function. But the matter of a test ban,

¹ "Soviet Draft Agreement on the Discontinuance of Nuclear and Thermonuclear Weapon Tests, November 28, 1961," Conference Document GEN/DNT/122, December 11, 1961, in ibid., pp. 158-159.

far from being dropped, became an even more urgent item on the disarmament agenda in view of the revelation that between September, 1961, and September, 1962, the total yield of the nuclear weapons tested by the Soviet Union was 200 megatons (out of a total of 250 megatons from all of its tests since 1949) and by the United States was 25 megatons (out of a total of 140 megatons from all of its tests since 1945).¹

Phase V: The Return to General Negotiations (1960-1962)

We have already observed that in the late fifties and early sixties a blueprint for general disarmament has been the subject of less serious and detailed negotiations than the test-ban question. Partially, this emphasis reflects an anxiety over radioactive fallout, particularly among the populations of the unaligned nations. It is also a reflection of the optimistic feeling that, in contrast to other areas of disarmament, the United States and the Soviet Union share a genuine common interest in bringing nuclear tests to a halt. But the negotiations on the broad-gauge aspects of disarmament have also been hampered by two other important factors: (1) the difficulty in coming to terms on the composition and procedures of a new negotiating forum and (2) the grandiose scope of the proposals that have been tabled, making it difficult to relate them to any semblance of political reality.

1

Statement by Adlai Stevenson to U. N. General Assembly, September 20, 1962, referred to in U. S., Arms Control and Disarmament Agency, Second Annual Report to Congress, January 1, 1962-December 31, 1962, Arms Control and Disarmament Agency Publication No. 14 (Washington: U. S. Government Printing Office, 1963), p. 22.

Following the breakup of the Subcommittee of Five on September 6, 1957, there were no formal East-West conversations on comprehensive disarmament until March, 1958, ostensibly because of disagreement on the question of what countries should participate in the negotiations. The General Assembly in 1958 had tried unsuccessfully to get the negotiations started again by bowing to the Soviet demand for the expansion of the Disarmament Commission to include the entire United Nations membership.¹ But not until the Big Four foreign ministers meeting in Geneva in August, 1959, did the United States, the United Kingdom, France, and the Soviet Union finally agree to hold exploratory talks aimed at setting up a framework within which the disarmament negotiations could be renewed.

The product of these consultations was a joint communique, issued on September 7, establishing a Ten Nation Disarmament Committee on which the two sides were to be equally represented (Canada, France, Italy, the United Kingdom, and the United States from NATO; Bulgaria, Czechoslovakia, Poland, Rumania, and Russia from the Warsaw Pact).² With Western acquiescence to the parity principle of representation, first at the Geneva Surprise Attack Conference in November, 1958, and then in the composition of the Ten Nation Disarmament Committee, the Soviet Union won an important tactical point. Henceforth in the negotiations the USSR would be able to take the offensive more readily and to dramatize its position with greater effectiveness.

¹General Assembly Resolution 1252 (XIII), November 4, 1958, in Documents on Disarmament, 1945-1959, II, 1214-1216.

²"Joint Announcement Made by the Governments of France, United Kingdom, United States of America and USSR on September 7, 1958," in

At this juncture, too, the Soviets made a spectacular grandstand play--their boldest stroke of disarmament diplomacy since 1955. The occasion was an address by Premier Khrushchev before the General Assembly on September 18, 1959, during his visit in the United States as the guest of President Eisenhower. Taking his cue from Maxim Litvinov's 1928 plan for general and complete disarmament,¹ Khrushchev proclaimed, in effect, that "the only way to disarm is to disarm." Because partial measures of disarmament would still leave states with the physical capacity to launch an attack, naturally no country could afford to "disclose its military secrets, the organization of its defence and war production, without prejudicing the interests of its own national security."² Therefore, he declared, the Soviet Government

. . . has reached the firm conclusion that the way out of the impasse must be sought through general and complete disarmament. This approach completely eliminates the possibility of any State gaining military advantages of any kind. General and complete disarmament will remove all the obstacles that have arisen during the discussion of questions involved by partial disarmament, and will clear the way for the institution of universal and complete control.

What does the Soviet Government propose?

Great Britain, House of Commons, Verbatim Records of the Meetings of the Ten-Power Disarmament Committee Held at the Palais des Nations, Geneva, March 15-April 29, 1960 and June 7-June 27, 1960 (1st-48th Meetings), Cmd. 1152 (London: Her Majesty's Stationery Office, 1960), p. 906. (Cited hereafter as Cmd. 1152, 1960).

¹See 'Draft Disarmament Convention Submitted by the Delegation of the Union of Socialist Soviet Republics,' February 15, 1928, in Marina Salvin, "Soviet Policy toward Disarmament," International Conciliation, CDKXVIII (February, 1947), 66-82.

²"Address by the Soviet Premier (Khrushchev) to the General Assembly [Extract], September 18, 1959," in Documents on Disarmament, 1945-1959, II, 1456.

The essence of our proposals is that, over a period of four years, all States should carry out complete disarmament and should divest themselves of the means of waging war.¹

What Khrushchev had in mind, it turned out, were three disarmament stages of fixed durations, one following automatically after the other so that the whole operation would be completed in about four years.² In stage one, American, Chinese, and Soviet armed forces would be reduced to 1.7 million men, along with corresponding (but unspecified) reductions in armaments. The reduced force levels of other countries would be determined by a special session of the General Assembly or by a special world conference. In stage two, the disbandment of armed forces would be completed and all foreign military bases eliminated. Stage three lumped together at least five measures: (1) the destruction of existing stocks and a ban on the production of weapons of mass destruction (biological chemical, and nuclear) and the means for delivering them (missiles and air force equipment); (2) the prohibition of scientific research for military purposes; (3) the termination of military training and the abolition of all forms of military service; (4) the discontinuance of appropriations for military purposes; and (5) the abolition of general staffs and other military and para-military organizations.

Without changing the tone of the traditional Soviet policy on verification, the proposal continued to place priority on disarmament

¹Ibid., pp. 1456-1457.

²"Declaration of the Soviet Government on General and Complete Disarmament, September 19, 1959," U. N. Document A/4219, in ibid., pp. 1460-1474.

before control:

Upon the completion of general and complete disarmament, . . . the international control organ shall have free access to all objects of control.¹

Khrushchev tempered his radical proposal, which he must have realized was utterly unacceptable to the West, by offering to negotiate separately on a program of partial measures, including:

- (1) The establishment of a control and inspection zone, and the reduction of foreign troops in the territories of the Western European countries concerned;
- (2) The establishment of an "atom-free" zone in Central Europe;
- (3) The withdrawal of all foreign troops from the territories of European states and the abolition of military bases on the territories of foreign states;
- (4) The conclusion of a non-aggression pact between the member States of NATO and the member States of the Warsaw Treaty;
- (5) The conclusion of an agreement on the prevention of surprise attack by one State on another.²

Although their partial measures "package proposal" of August 29, 1957, dealt with three of these topics, the Western powers did not respond to this Soviet overture for narrow-gauge discussions. Instead, mainly because of propaganda considerations, they followed the Russian lead and embraced the principle of "general and complete disarmament" as the ultimate goal while refusing to accept the specific Russian formula for realizing it. This had the effect of shifting the focus of the general negotiations from partial measures, which had been emphasized since 1955, back to the comprehensive approach which had prevailed in

¹Ibid., p. 1473. Italics added.

²Ibid., p. 1459.

1954 and 1955. Both sides on November 20, 1959, joined in supporting a General Assembly resolution (one of the few dealing with disarmament ever to be adopted unanimously) expressing the hope "that measures leading towards the goal of general and complete disarmament under effective international control will be worked out in detail and agreed upon in the shortest possible time."¹ Later, in the negotiations of the Ten-Nation Committee, however, the USSR attempted to construe the resolution as an endorsement of the Khrushchev plan and not simply of the abstract idea of complete disarmament--another maneuver which placed the Western governments on the diplomatic defensive.

They also faced one other serious disadvantage in the debate of the Ten Nation Committee which began on March 15, 1960.² The proposal they brought to Geneva lacked any propaganda appeal that could be used to counteract the widespread support and curiosity stirred up by Khrushchev's panacean proposal for cutting through all obstacles to disarmament in one sweeping blow. It can only be described as colorless, unimaginative, and indefinite.³

Structurally, the Western plan was made up of three parts, each

¹ General Assembly Resolution 1378 (XIV), November 20, 1959, in ibid., p. 1545.

² The Ten Nation Committee was in session from March 15 to April 29 and June 7 to June 27, 1960. For the verbatim record of its meetings, see Cmd. 1152, 1960.

³ The failure of the Eisenhower Administration to decide on a clear, positive disarmament policy in advance of the Ten Nation talks is analyzed in Joseph Alsop, "U. S. Founders in Bag of Disarmament Indecision," Tampa Tribune, February 20, 1960.

to be agreed upon separately after the implementation of the previous one (in contrast to the three interconnected stages of the Soviet scheme).¹ Six first-stage moves were to be "undertaken forthwith," only one of which involved any direct arms limitation: (1) the creation of an International Disarmament Organization (IDO); (2) prior notification of the IDO of the proposed launchings of space vehicles; (3) the collection of information on force levels; (4) the reduction of American and Soviet force levels to 2.5 million men and the storage of "agreed types and quantities" of conventional arms in depots under international supervision;² (5) the submission to the IDO by states of data on the amount of their military expenditures; and (6) technical studies on various aspects of disarmament.

After the "successful completion of relevant preparatory studies" (which apparently could occur before the termination of the first stage), the following steps would be taken in the second phase "as rapidly as possible": (1) a prohibition against orbiting weapons of mass destruction in outer space; (2) prior notification of the IDO of proposed launchings of missiles, declaration of the location of launching sites and places of manufacture of missiles, and on-site inspection of missile

¹ "Western Paper Submitted to the Ten Nation Committee on Disarmament: A Plan for General and Complete Disarmament in a Free and Peaceful World, March 16, 1960," Conference Document TNCD/3, in Documents on Disarmament, 1960, pp. 68-71.

² Already, on January 15, 1960, the USSR had announced plans for cutting its armed forces to 2,423,000. New York Times, January 16, 1960. In 1960 the personnel of American armed forces numbered 2,476,000. U. S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1961, p. 240.

launching sites; (3) cessation of the production of fissionable materials for weapons purposes and the transfer of agreed quantities of such materials from existing stocks over to peaceful uses; (4) establishment of surprise attack prevention measures, "including aerial inspection, ground observers at agreed points, mobile ground teams, overlapping radar, notification of aircraft flights, and appropriate communications"; (5) lowering of American and Soviet force levels to 2.1 million men upon the adherence of all "militarily significant states" (i.e., China) to agreed reductions in forces and the storage of additional quantities of armaments in international depots; (6) establishment of measures to verify budgetary information; (7) "further progressive development" of the IDO; and (8) "the initial establishment of the international organization to preserve world peace."

Ultimately, the disarmament process would be expanded in the third phase to include: (1) the reduction of arms and armed forces "to levels required by internal security and fulfilment of obligations under the United Nations Charter"; (2) the prohibition of the production of weapons of mass destruction along with steps "in the light of the latest scientific knowledge, to achieve the final elimination of those weapons"; (3) "measures to ensure the use of outer space for peaceful uses only"; (4) the control and, finally, the elimination of military missiles; (5) international control of military budgets; and (6) "completion of the establishment of international organizations and arrangements to preserve world peace."

Measured by their August, 1957, omnibus plan, the disarmament

proposal of the Western powers just discussed represented a distinct move backward in terms, first, of the amount of disarmament it offered in the initial stage (the one that really counts) and, second, the preciseness and concreteness of its provisions. By deferring practically all substantive arms control undertakings to later phases (which it should be remembered would have to be negotiated later on), it left the United States and its allies open to the charge that they were proposing control without disarmament. This vulnerability was exploited fully in the Ten Nation Committee by the Communist bloc who argued repeatedly that the Western plan did not fulfill the terms of the November, 1959, General Assembly resolution on general and complete disarmament.

With the West refusing to discuss the details of disarmament until the control question had been settled and the Soviet bloc insisting on agreement first on the actual disarmament measures to be carried out in the three-stage four-year period, the Ten Nation Committee was bogged down from the start. Assistant Secretary of Defense Irwin, in his report to a Senate subcommittee on the first thirty-two meetings of the Committee, observed flatly that "the only thing agreed on has been the recess."¹

On April 5 and April 7, the West and the Soviet bloc summarily

¹ U. S., Senate, Disarmament Subcommittee of the Committee on Foreign Relations, Hearing, Disarmament Developments, Spring 1960, 86th Cong., 2d Sess., June 10, 1960, p. 10. See also the "Official Report of the United States Delegation to the Conference of the Ten Nation Committee on Disarmament, August 5, 1960," in Documents on Disarmament, 1960, pp. 188-198.

rejected the proposals of the other side as a basis for discussion.¹ The Soviet representative then took a new tack by reintroducing the Russian plan in the guise of a statement of "Basic Principles of General and Complete Disarmament."² It called for the elimination of all national war-making capabilities within a strictly defined time limit (four years) "under international control of scope corresponding to the scope and nature of disarmament measures implemented at each stage."³ Moreover, in advance of the conclusion of a disarmament treaty, the nuclear powers would have pledged themselves not to be the first ones to use nuclear weapons. Especially objectionable to the West, however, was a clause stating that:

Implementation by States of the programme of general and complete disarmament may not be interrupted or made dependent on the fulfilment of any conditions not stipulated in the Treaty.⁴

The only safeguard mentioned was the referral of treaty violations to the Security Council and the General Assembly "for the institution of measures against the violator in accordance with the provisions of the United Nations Charter" (meaning, in other words, that the big power veto of any sanctions would be applicable).⁵

¹Cmd. 1152, 1960, pp. 305, 357.

²"Soviet-Bloc Proposal Submitted to the Ten Nation Committee on Disarmament, April 8, 1960," Conference Document TNCD/4, in Documents on Disarmament, 1960, pp. 79-80.

³Ibid., p. 79.

⁴Ibid., p. 80.

⁵Ibid.

On April 26 the five Western members of the Committee retorted with their own set of general principles which succinctly reiterated the terms under which they would agree to disarm:

- (a) disarmament must be carried out by stages, each stage to be completed as rapidly as possible although no fixed timetable can be laid down in advance for the process as a whole;
- (b) nuclear and conventional measures must be balanced so that no country or group of countries will obtain, at any stage, a significant military advantage and so that equal security for all will be maintained and thus international confidence progressively increased;
- (c) disarmament measures must be effectively controlled throughout by an International Disarmament Organization within the framework of the United Nations, to ensure that compliance with these measures is verified from their entry into force and that there is no evasion throughout the disarmament process and thereafter;
- (d) disarmament measures must be negotiated progressively according to the possibility of their early implementation and effective control.¹

The deadlocked Ten Nation Committee finally recessed on April 29 to await the results of the Paris summit meeting of the Big Four coming up in May. But in the wake of the U-2 affair, that conference never got off the ground. Nevertheless, somewhat to the surprise of the West, the Communist delegations showed up at Geneva to resume work on June 7, the date for reconvening set by the Ten Nation Committee at the time it recessed. At the opening session the Soviet Union wasted no time in renewing its diplomatic offensive by tabling with great pomp a more elaborate version of the Khrushchev plan for general and complete disarmament.² Because it is one of the three or four most

¹"Western Proposal Submitted to the Ten Nation Committee on Disarmament: Principles and Conditions for General and Complete Disarmament under Effective International Control, April 26, 1960," Conference Document THCD/5, in *ibid.*, p. 32.

²"Proposals by the Soviet Government: Basic Provisions of a

detailed disarmament documents coming from the Russians in the postwar period, its contents merit careful examination.

The main modification, probably inserted in hopes of splitting the Western alliance, was the acceptance of a French proposal that disarmament should begin in the first stage with the destruction of the means for delivering weapons of mass destruction. The USSR called attention pointedly to its willingness to take this step "despite the fact that it has a generally recognized superiority in . . . intercontinental ballistic missiles."¹

Other measures in the earlier Soviet design for disarmament were also moved up to the first stage: (1) withdrawal of all troops from foreign territories and the elimination of foreign military bases; (2) prohibition of the orbiting in outer space of any "special devices"; (3) prohibition of the leaving of their territorial waters by warships and the flying beyond their national territory waters by military aircraft capable of carrying weapons of mass destruction; (4) prohibition of the transfer of nuclear weapons, or information on their manufacture, by nuclear states to non-nuclear states; and (5) reduction of military expenditures.

The second stage prescribed a complete prohibition of nuclear and other weapons of mass destruction (the cessation of production and the destruction of existing stockpiles) and the lowering of American and Russian force levels to 1.7 million men. The abolition of armed forces

Treaty on General and Complete Disarmament, June 2, 1960," Conference Document TNCD/6/Rev. 1, June 8, 1960, in ibid., pp. 100-111.

¹Ibid., p. 103.

and the destruction of conventional armaments would be completed in the third stage. Appropriations for military purposes would also cease and war ministries, general staffs, and all military and para-military organizations would be abolished.

Furthermore, the proposal devoted considerably more attention than usual to spelling out the particulars of international inspection and control. In stage one, a control organization, composed of all parties to the treaty, would be set up "within the framework of the United Nations the moment the treaty comes into force." The Control Council, consisting of permanent and non-permanent members, would have "its own local organs." Decisions of the Control Council would be taken by a two-thirds' majority vote on substantive questions and by a simple majority vote on procedural items.

Regarding the crucial matter of the control machinery, the Soviet document went on to state that

. . . the control organization will have its own staff, recruited internationally with due regard for the principle of equitable geographic distribution, and in accordance with the provision of the treaty. The control organization will distribute its inspectors over the territory of States in such a way as to enable them to start discharging their functions the moment States initiate the implementation of disarmament measures. Each party to the treaty will undertake to give the inspectors and inspection teams timely and unrestricted access within its territory to any place where disarmament measures subject to verification are being carried out or to any area in which on-the-spot inspection of such measures is to be made.¹

Specifically, international control in the first stage would be

¹Ibid., p. 106.

established over the destruction of delivery vehicles for nuclear weapons:

The control organization will have the right to inspect without hindrance all enterprises, plants, factories and shipyards, previously engaged wholly or in part in the production of rockets, aircraft, surface warships, submarines and other means of delivering nuclear weapons, in order to prevent the organization of clandestine production of armaments which can be used as vehicles for atomic and hydrogen weapons. By agreement, permanent control teams may be established at some plants and installations.¹

In addition, international inspection teams would supervise the elimination of foreign military bases and the withdrawal of troops stationed on foreign territories.

The control operation in the second stage would be broadened to cover the destruction of nuclear, chemical, and biological weapons (as well as the inspection of enterprises which produce or use fissionable materials) and the disbanding of troops. The control organization would also have access to budgetary data on national military expenditures. But, perhaps connected with the exposure of American U-2 spy flights, only in the third stage would a system of aerial inspection and aerial photography be installed.

Finally, the Soviet proposal to an extent heretofore unknown recognized the need to fill the security vacuum that would be created by total disarmament. States would examine this problem so that during the last stage of disarmament

. . . such measures, in accordance with the United Nations Charter, would be taken as are necessary for the maintenance of peace in conditions of general and complete disarmament, including the obligation of States to place at the

¹ Ibid., p. 103.

disposal of the Security Council, whenever necessary, police (militia) detachments in order to ensure the maintenance of peace. Of course, such police (militia) detachments may be used solely for the purpose of maintaining peace among nations, not for the suppression of peoples who are struggling for their independence and social progress, and not for interference in internal affairs of States.¹

At first sight it might appear that Soviet policy was evolving in the right direction as far as Western interests were concerned. But the USSR clung unyieldingly to two conditions which the West never could agree to: First, the Russians expressed a willingness to permit inspection and control of disarmament but not of armaments. That is, they "would limit the inspectors merely to counting those particular installations or forces that a government declared it was eliminating" without granting them the right to determine if clandestine installations and weapons in excess of agreed amounts existed.² Second, while indicating that they would not hold unalterably to a four-year timetable, the Soviets nevertheless made it clear that some fixed time schedule was an indispensable feature of any general disarmament treaty.

Although the position they took could hardly have been otherwise, the Western camp found it difficult to justify the validity of their objections to the Russian disarmament formula as they continued to be peppered by the oversimplified--yet appealing--slogans recited by the Communist delegations. Moreover, they had no firm counterproposal with which to trump the Russian bid.

¹Ibid., p. 104.

²"Official Report to the Secretary of State by the United States Delegation to the Conference of the Ten Nation Committee on Disarmament, August 5, 1960," in ibid., p. 193.

In an effort to recapture the initiative in the negotiations, American ambassador Frederick M. Eaton flew to Washington on June 17 for consultations. He brought back to Geneva a disarmament plan which modified the Western draft proposal of March 16 mainly by moving up to the first stage several measures originally scheduled for the second stage.¹ But before he had the opportunity formally to present it to the Ten Nation Committee, the Soviet bloc delegations, apparently convinced that they had nothing more to gain from a continuation of the discussion, staged a noisy walkout at the forty-seventh meeting on June 27 and accused the United States of being responsible for the failure to make any progress.² Thus once again the disarmament negotiations had gone through the full life cycle which they have characteristically followed--this time in only a little over three months.

Summary and Conclusions

Thus far we have viewed the problem of disarmament through a wide-angle lense with the purpose of testing the assumption that the primary cause of the failure of the postwar negotiations has been the unresolved question of inspection and control. This brought us to the conclusion that both logically (theoretically) and actually (historically) all facets of American and Russian disarmament policy have hinged on their view of inspection and control. In short, it is clear that the

¹"United States Paper Submitted to the Ten Nation Committee on Disarmament: Program for General and Complete Disarmament under Effective International Control, June 27, 1960," Conference Document THCD/7, in ibid., pp. 126-131.

²See "Letter from Premier Khrushchev to President Eisenhower, June 27, 1960," in ibid., pp. 132-136.

ultimate and essential test of whether any East-West arms agreement is possible depends upon bridging the gap between their divergent approaches to the way the agreement should be administered.

Our study of the actual policies of the two superpowers suggests that this gap, despite its sizable width at present, is not so great as it was in 1946. Initially, the positions of the United States and the Soviet Union were at polar extremes to one another. With the Baruch Plan, the United States sought absolute security through a "foolproof," high-intensity system of international controls that seriously invaded the domain of national sovereignty. Moreover, Soviet acceptance of the unlimited jurisdiction of the Atomic Development Authority over the field of atomic energy would have meant, for all practical purposes, submission to total inspection--a concept alien both to the historical tradition and the political system of the USSR. So Russian assent to the American plan was hardly conceivable although, ironically, up to 1933 the Soviet Union vigorously promoted the idea of inspection and control while the United States opposed it just as strongly.¹ But in 1946 the roles were reversed, with the Russians denying any place for inspection and control in disarmament and calling instead for national laws to enforce the prohibition of atomic weapons.

From this point on, although the general flavor of their policies remained the same, American and Soviet positions on inspection and control were noticeably moderated--at least verbally. In February, 1947, the

¹Allen W. Dulles, "Disarmament in the Atomic Age," Foreign Affairs, XXV (January, 1947), 203-209.

Russians accepted the principle of international control over the abolition and prohibition of atomic weapons, with specific arrangements to be agreed on after the signing of a treaty outlawing atomic weapons. The following June, they then agreed to "strict international control," to begin simultaneously with the prohibition of atomic weapons. No details about what they specifically had in mind were ever supplied.

Meanwhile, the United States gradually scaled down the intensity of the international controls it proposed. Beginning in May, 1954, it openly dropped the idea of the management of all atomic energy activities by the control organ and ceased to demand the suspension of the Security Council veto during consideration of sanctions against violators of an atomic energy control treaty. Progressively, American policy placed more reliance on inspection (i.e., verification), with correspondingly less emphasis on controls (i.e., sanctions and enforcement), as the main safeguard against evasions of a disarmament treaty.

Parallel with these developments, the Soviet Union in May, 1955, came up with a fresh approach--the use of inspection, not only to verify disarmament, but also to discourage surprise attack by stationing inspectors at key checkpoints where large movements of men and matériel, as well as other mobilization, could be detected. Subsequently, the United States urged that aerial photography be included as a part of such a warning system.

Interest in the prevention of surprise attack stimulated the investigation of a number of other so-called "confidence-building measures" which were supposed to pave the way for more substantial disarmament

moves. Chief among these was a controlled ban of the testing of nuclear weapons, which has been the subject of the most thorough and concrete disarmament negotiations of the last seventeen years. Although the maximalist-minimalist inspection bias of the United States and the Soviet Union has shown up at most every point in their conversations about a test-ban treaty, each has to some extent bowed to the interests of the other. The United States has shown a willingness to accept less, and the Soviet Union to grant more, inspection than they would really prefer to have. The original American demand for about twenty on-site inspections annually was lowered in 1963 to under ten. The Soviet Union in 1960 hesitatingly set the total annual number of inspections at three, withdrew this offer in late 1961, and then reinstated it in late 1962.

When, in 1960, the negotiations on comprehensive disarmament finally started up again, the USSR added a new twist to its policy line on inspection: It was willing to permit "strict international control" of disarmament (the destruction of armaments and the disbanding of armed forces) but not of armaments (remaining weapons and troops). The United States, on the other hand, stuck to its insistence that the inspection operation must also allow the ferreting out of possible clandestine violations of the disarmament treaty. Yet at the same time, the American approach defined the verification process in much less inclusive terms than formerly and recognized that the degree of control must be in balance with the degree of disarmament. The United States, for example, in 1962 put forward a plan for zonal inspection whereby a country would be divided into inspection zones and only one zone at a time opened up

for inspection.¹

Boiled down to essentials, such has been the basic position of the United States and the Soviet Union on inspection and control. The divergence between their positions can be further distilled down to three areas of disagreement: (1) the intensity of inspection (how much and what kind of inspection is to be allowed); (2) the priority of inspection (at what point in the disarmament process inspection facilities are to be installed and permitted to become operational); and (3) the composition of the inspectorate (the limitations as to who will and will not be authorized to participate in inspectional activities).

In the pages that follow, we must carefully examine these thorny problems which have made inspection and control such a stubborn issue. To facilitate our inquiry, we might differentiate analytically between two kinds of difficulties: those which are inherent in inspection as a concept no matter what states are involved and those arising out of the particular configuration of the relations between the United States and the Soviet Union.

Primarily, of course, the failure of seventeen years of negotiations on inspection and control can be traced to particular conflicts between the national interests of the two countries--to the obsession of the Soviet regime with secrecy and a monumental suspicion of foreigners and to the equally strong American fear of being caught off-guard by

¹U. S., Arms Control and Disarmament Agency, Progressive Inspection for Disarmament: The Concept of Progressive Zonal Inspection, Arms Control and Disarmament Agency Publication No. 13 (Washington: U. S. Government Printing Office, 1963).

clandestine actions of the enemy. But beyond the particular causes of the East-West deadlock, certain general complications would be encountered in any attempt by states to institute inspection and control, no matter what the character of their ideological commitment or the level of conflict between them might be. Under this category would be classified the mechanical and technical difficulties growing directly out of the operation of inspection rather than out of the political hostility between nations. To be sure, political tensions make these mechanical and technical difficulties more intractable, but the lessening, or even the removal, of political conflict would not in itself resolve them. Moreover, here the motivations of the participants in the negotiations are not directly pertinent because such difficulties would almost certainly arise whether or not an agreement is being seriously sought.

By drawing this distinction, we are able to avoid unsatisfactory sweeping generalizations which make either the Russian-American power struggle or the absence of technically sound inspection methods the sole explanation for what has happened. In the final analysis, it is unrealistic to expect any agreement on inspection and control unless both sides find it politically desirable and technically feasible.

In the next chapter we shall limit our attention to the general mechanical and operational difficulties of inspection, reserving for Chapter VII a consideration of those obstructions traceable to particular circumstances in Russian-American relations.

CHAPTER VI

INSPECTION AND CONTROL DIFFICULTIES: MECHANICAL AND OPERATIONAL ASPECTS

The United States after World War II abandoned the traditional practice of relying altogether on national intelligence resources and the good faith of the other parties to ensure the observance of treaty provisions. Up to that time, it was taken for granted that if an international agreement embodied only the mutual self-interests of the participating countries, its terms would be carried out as a matter of course. Elaborate control systems, in reality a mechanical substitute for mutual trust, were not regarded as essential although it was not unusual for a treaty to facilitate verification by specifying that the parties furnish each other with information indicating their compliance.¹

As has already been pointed out, until after World War II there was little preoccupation with the subject of the verification and enforcement of disarmament. Certainly, it was not the key to disarmament. Why, then, did a question which remained in the background of the disarmament negotiations for over thirty years suddenly become the focal point of attention? Three important factors come to mind: (1) American experience with unverified international agreements between the two

¹See, for example, Article 6 of the Convention on the Limitation of Armaments of Central American States, February 7, 1923, in U. S., Senate, Subcommittee on Disarmament, Committee on Foreign Relations, Disarmament and Security: A Collection of Documents, 1919-55, 84th Cong., 2d Sess., 1956, p. 29; Articles 10 and 21 of the London Treaty on Limitation and Reduction of Naval Armament, April 22, 1930, in ibid., pp. 34, 41; and Article 11 of the London Treaty on Limitation of Naval Armament, March 25, 1936, in ibid., pp. 47-48. (Hereafter cited as Disarmament and Security.)

world wars; (2) the characteristics of nuclear weapon systems; and (3) the intense political frictions of the Cold War.

In a very real sense, the top priority which the United States now attaches to inspection is a reaction to the frustrations growing out of interwar agreements that included no provisions for assuring compliance. In the Far East, Japan was awarded custody of the mandated islands (the Mariannas, the Carolines, and the Marshalls) formerly held by Germany on the condition that no bases or fortifications would be established on them. The Japanese also obligated themselves under the terms of the Washington Treaty of 1922 not to construct any new fortifications or naval bases on the Kuriles, the Bonins, the Loochoos, the Pescadores, Amami-Oshima, and Formosa.¹ Yet there was no way of telling whether these commitments were being observed because the Japanese refused to allow League representatives to inspect the mandated islands and severely restricted the movement of foreign travelers.

The exclusion of foreign observers created the impression that Japan was secretly building island fortresses in the Pacific which, if true, posed a serious threat to the American position in Guam and the Philippines. So for nearly twenty years the United States was uncertain and uneasy about the magnitude of the Japanese military threat to its interests in the Far East. Later evidence failed to bear out American suspicions; it showed, on the contrary, that most of the bases and

¹ "Treaty on Limitation of Naval Armament, Washington, February 6, 1922," in *ibid.*, p. 16.

coastal defenses on the mandated islands were erected after 1939.¹ Nevertheless, this case clearly pointed up the inherent danger of entering into an agreement when flagrant violations of its terms cannot be readily detected--a lesson remembered by postwar American negotiators.²

The emphasis on inspection in the disarmament negotiations since 1945 can also be explained in part by the nature of nuclear weapons. The main emphasis of disarmament attempts during the interwar years, it will be recalled, was on the limitation and reduction of naval armaments, particularly capital ships. Capital ships were difficult to conceal; they took an extended period of time to construct (three years or more); the construction sites were few in number and could not be hidden; and the total number of all such vessels was not large.³ Owing to these circumstances, virtually none of the violations of the naval limitations treaties went undetected even though no formal verification procedures were estab-

¹Thomas Wilds, "How Japan Fortified the Mandated Islands," United States Naval Institute Proceedings, LXXXI (April, 1955), 401-407.

²Note, for example, the following statement of Harold E. Stassen to the Subcommittee of Five on September 6, 1955: "It is the view of the United States Government that the establishment of an effective method of inspection, reporting and control is the first requirement for a sound agreement in relation to armaments. Not only is such a system essential to safeguard the security of all participants in such an agreement, but also history indicates that agreements without adequate inspection lead to doubts and suspicions and uncertainty and new tensions between the signatories. . . . Thus, in fact, agreements without adequate inspection have been counter-productive in earlier periods in so far as the objective of a mutually desirable peace is concerned." Documents on Disarmament, 1945-1959, I, 510.

³Hartmann, p. 291.

¹lished. More important still, even if a few instances of cheating slipped by unnoticed, the overall military balance of power was not likely to be seriously disturbed.

But nuclear weapons, unhappily, have few of the attributes of battleships. They are small, easily hidden, capable of being manufactured in concealed installations, and are numbered in the tens of thousands. Moreover, their awesome destructive potential increases many-fold the costs of the failure to detect violations of an agreement limiting or prohibiting them. Consequently, a formal inspection system is indispensable as a safeguard for nuclear arms control.

Finally, the hostile relations between the Soviet Union and the Western powers, plus the obsessions of Communist governments with secrecy, has upgraded the importance of inspection. Operating under the assumption that a Communist government, if afforded the opportunity, would evade its treaty commitment, the Western powers have insisted that formal agreements incorporate explicit provisions for verification except where violations would be self-evident, as in the case of the Austrian Peace Treaty. The Korean Armistice of 1953, the Geneva accords on Vietnam and Laos in 1954 and 1962, the Antarctica Treaty, and the Statute of the International Atomic Energy Agency all contained some form of inspection and control agreement. Traditionally, most peacetime international agreements between adversary states have come about as the

¹Institute for Defense Analyses, Verification and Response in Disarmament Agreements (Washington: Institute for Defense Analyses, 1962), Annex Vol. II, p. 13. (Hereafter cited as Verification and Response in Disarmament Agreements.)

result of a rapprochement. The East-West agreements of the Cold War, however, have been arrived at in an environment of tension and have failed to resolve conflicting vital national interests. This explains partially why inspection is considered to be more necessary now than it was in the past.

Having considered why inspection and control has become the crux of the problem of disarmament, let us look more closely at the functions it is intended to serve.

The Functions of Inspection in Disarmament

Interestingly enough, in 1946 the United States did not place much faith in inspection as an approach to the enforcement of atomic disarmament. The Acheson-Lilienthal Report (on which the Baruch Plan was based) challenged the validity of the idea of inspection on the grounds that, inter alia, under a "cops-and-robbers" theory of control, the "people charged with policing the agreement . . . couldn't possibly know as much as those they were trying to police."¹ As an alternative to leaving atomic energy in the hands of nations and inspecting to see that only peaceful uses were made of it, the United States wanted to turn over to an Atomic Development Authority the ownership or managerial control of all installations producing nuclear fuel, as well as stock-piles of nuclear fuel and all "dangerous" activities. Under the Baruch plan inspection would have been used as an auxiliary safeguard primarily

¹ Dean Acheson, quoted in The International Control of Atomic Energy: Growth of a Policy, p. 37.

for the purpose of uncovering illegal national atomic operations.

But the Baruch Plan in the early 1950's faded into the background and with it, the prospects of a supranational political framework for the implementation of disarmament. This meant, realistically, that henceforth any action on disarmament would have to take place within a setting where states were the actors exercising ultimate decision-making authority. With no supranational institution to prevent countries from openly or secretly reneging on their disarmament obligations, it was essential that the participants in an arms control agreement have an accurate indication as to whether all parties concerned were living up to their commitments. In general, the negotiations after 1954 looked to some form of inspection system as the most practicable method of providing this information. Thus inspection was elevated from a supporting to a starring role.

Whether inspection can adequately fulfill that role hinges on the accomplishment of at least three tasks.¹ The first task of inspection is to deter violations of the agreement by confronting potential violators with a high probability of detection. Here the assumption is that states will not enter into an agreement imposing reciprocal restraints on their military capabilities unless it is in their mutual interests to do so. If a pact is made and neither side abides by it, no one gains any advantage. Similarly, if both comply with it, presumably they would

¹The functions of inspection are also discussed in Lawrence S. Finkelstein, "Arms Inspection," International Conciliation, DXL (November, 1962), 16-18.

realize common benefits. It follows from these premises that the partners in an agreement would have a strong incentive to cheat only if there is a good chance of not being caught. In this way, one party could achieve important unilateral advances by secretly carrying on prohibited activities while the other participants blandly observed their commitments. Consequently, to guard against such a contingency the inspection system has to operate on the basis of the "negative evidence" principle--that is, it must prove the absence of violations while taking for granted that the countries being inspected are trying to hide something. So if there exist theoretical methods of circumventing an arms control regulation, in the absence of proof to the contrary it must be assumed that they are actually being utilized. Even if unrestricted inspection is allowed, however, it is by no means certain that this proof can be reliably produced. It is much easier to verify what is being done than what is not being done.

The uninspected moratorium on nuclear testing from November, 1958, to September, 1961, is a case in point. As far as is publicly known, no evidence was ever uncovered to prove, or even suggest, that the Russians were testing nuclear weapons during the moratorium. Still, governmental officials of the United States became increasingly alarmed in 1960 and 1961 lest the Soviet Union drag out the test-ban talks indefinitely while continuing their own program of nuclear testing under a cloak of secrecy.¹ Anxieties were sharpened further by the revelation by American

¹See President Kennedy's statement of August 10, 1961, on this point, in Geneva Conference, p. 568.

scientists that it was technically feasible to explode nuclear devices in large underground cavities (the "big hole" theory) which would muffle the accompanying shock waves and thus prevent seismic detection, or at least cause the size of the explosion to appear smaller than it actually was.¹ As a result, at the time the Russians broke the test moratorium on September 1, 1961, considerable pressure was also building up within the United States Government to take the same step.

The second task of inspection is to detect violations with an acceptable degree of certainty and to transmit this information rapidly to the other parties in order to provide them with ample lead-time to respond with countermeasures.² More than almost certain detection is necessary if violations are to be deterred. Potential offenders must, in addition, expect a strong response so detrimental to their interests as to outweigh any gains from flagrant cheating.

Yet it is not enough that an inspection system should serve as an efficient fire alarm. The evidence of non-compliance it yields also has to be credible. In the words of Thomas C. Schelling and Morton H. Halperin:

. . . It is one thing to "know" that something is going on; it is another to persuade one's allies, or some judicial body or world opinion, the suspected violator, or even ourselves, that we have reliable evidence. . . . Governments must

¹Edward Teller and Allen Brown, The Legacy of Hiroshima (Garden City, N. Y.: Doubleday and Co., Inc., 1962), pp. 194-196.

²A thought-provoking analysis of the problem of response after a violation has taken place can be found in Fred C. Iklé, "After Detection --What?" Foreign Affairs, XXXIX (January, 1961), 208-220.

consider whether they can persuade even their own populations, their own press or legislature, or their own political opposition, that their allegations of violations are valid and responsible. This will particularly be the case when the evidence is imperfect, and requires a judgment of the likelihood that willful or inadvertent violation has occurred.¹

Exactly how critical this factor can be was illustrated in the Cuban crisis of October, 1961. The United States, instead of immediately acting to secure the removal of "offensive" Soviet missiles after their discovery, waited until conclusive proof in the form of aerial reconnaissance photographs could be mastered. By doing this, President Kennedy was able to mobilize strong domestic and international support behind the position of the United States.

The third task of inspection is to afford the enemy an opportunity to demonstrate his lack of aggressive intentions when an ambiguous or inadvertent violation of the arms control agreement occurs or when there are apparent signs of preparations for a surprise attack. If these turned out to be false alarms, then hopefully the collapse of the agreement, or perhaps even a pre-emptive or preventive nuclear strike, could be averted.² President Eisenhower stated the need poignantly:

The advent of missiles with even shorter reaction times makes measures to curtail the danger of war by miscalculation increasingly necessary. States must be able quickly to assure each other that they are not preparing aggressive moves--particularly in international crises,

¹ Schelling and Halperin, Strategy and Arms Control, pp. 92-93.

² The pioneer study in this area is Thomas C. Schelling, "Arms Control: Proposal for a Special Surveillance Force," World Politics, XIII (October, 1960), 1-18.

when each side takes steps to improve its own defenses, which actions might be misinterpreted by the other. Such misinterpretation, in the absence of machinery to verify that neither was preparing to attack the other, could lead to a war which no one had intended or wanted.

Today the danger of war by miscalculation could be reduced, in times of crisis, by the intervention, when requested by any nation seeking to prove its own peaceful intention, of an appropriate United Nations surveillance body.¹

Technically, inspection systems designed to operate in situations where governments, instead of attempting to conceal their actions, are eager to provide positive evidence of their compliance would be mechanically simpler and more reliable than negative evidence inspection. On the other hand, it is unlikely that nations would resort to this procedure except as a last resort. And even if they wanted to, governments would be unable to give foolproof assurances on a number of points such as the destruction of nuclear weapon stockpiles, given the present state of inspection technology.

It should be noted that the three functions of inspection (deterrence, detection, and reassurance), though interrelated, place substantially different demands on a control system. An apparatus judged to be sufficiently capable of deterring major evasions would not necessarily have to guarantee the detection of every infraction.² Alternately, the relatively uncomplicated machinery required for giving reassurance in

¹"Address by President Eisenhower to the General Assembly [Extract], September 22, 1960," in Documents on Disarmament, 1960, p. 227.

²Donald G. Brennan and Morton H. Halperin, "Policy Considerations of a Nuclear-Test Ban," Arms Control, Disarmament, and National Security ed. Donald G. Brennan (New York: George Braziller, 1961), p. 262.

crisis periods might be unsuitable for implementing either of the other two functions. Therefore, we are dealing not with coordinate, but hierarchical functions. All inspection systems, in other words, are oriented more strongly toward one task than the others, depending on what objective is being sought.

Now that we have clarified the functional role of inspection in disarmament, let us move on to a consideration of the difficulties encountered by efforts to translate the theory into practice. The first class of difficulties--mechanical and operational--originate in some five problem areas: (1) the control potential of the weapons under consideration; (2) the sensitivity and workability of the technical methods of verification; (3) the institutional framework for organizing and implementing inspection; (4) the procedures for keeping the inspection system technologically up-to-date; (5) "legal" and "illegal" evasions of the arms control provisions; and the responses available to innocent parties in the face of violations. The remainder of the chapter will be devoted to a point by point examination of these complications.

The Control Potential of Weapons

The factors determining the outer limits of the technical feasibility of inspection are, first, the inherent controllability of any particular weapon and, second, the efficacy of the means of detection. Of these, the former is more influential than the latter and thus should be considered first.

Taking the whole cycle through which any mass-produced weapon must go, we can discern five possible control points where inspection

may be set up to oversee the implementation of arms controls: (1) research and development, (2) testing, (3) production, (4) stockpiling, and (5) deployment.¹ For greatest effectiveness, any given control system should be designed around those critical control points of a weapon having the highest control potential. The Baruch Plan, for example, sought to eliminate atomic armaments through a stringent set of controls directed mainly at the first three stages of the cycle: control over uranium deposits, over all plants producing fissionable materials, and over research in the field of atomic explosives.²

But the situation a few years later was altogether different. The point of no return had passed for the controlled abolition of atomic weapons because of the accumulation of large inventories of these weapons which could never be wholly accounted for. Thenceforth, the most that could be guaranteed was a cessation of the future production of fissionable materials for use in weapons production. Since this was not very promising, the United States (and to a lesser extent the Soviet Union) after 1954 became increasingly interested in the possibility of inspection to monitor the deployment of arms and armed forces as the next best alternative. But in more recent years, attention has moved back to the earlier stages of the cycle in an attempt to slow down the qualitative arms race by restricting nuclear and missile testing.

¹Bernard T. Feld, et al., The Technical Problems of Arms Control (New York: Institute for International Order, 1960), pp. 10-11.

²"The Baruch Plan: Statement by the United States Representative (Baruch) to the United Nations Atomic Energy Commission, June 14, 1946," in Documents on Disarmament, 1945-1959, I, 13-14.

Inspection methods, it should be noted, are as "sensors" of signals which are emitted when evasion activities take place. Depending on the strength of the signals that are given off, the control potential in a specific case is high or low. If a certain type of violation produces no signal (visual, electronic, radiological, or otherwise) or if the signal can be easily muffled or masked, inspection cannot function properly no matter how extensive or intensive it might be. Chemical and biological (CB) weapons, to cite only one example, provide no definite cues which might draw attention to violations; therefore, they are virtually uninspectable:

Again, CB weapons do not require elaborate or large-scale facilities for their manufacture. The raw materials are cheap and can be processed in ordinary chemical or microbiological laboratories under conditions where it would be most difficult to detect violations. How could one tell, for instance, whether a certain plant was preparing vaccines or making biological agents for weapons? Furthermore, it is relatively easy to shift from some chemical processes to others and this fact, added to the large number of possible facilities, would render effective inspection of manufacture so difficult as to be practically infeasible.¹

Fortunately, however, most types of weapons do have some degree of control potential at one or more of the five points mentioned earlier. But due to the nature of nuclear age military technology, the control potential appears to be greatest in the nascent stage of development of a weapons system. Yet at this point there is ordinarily less urgency to bring the weapon under inspection and control than later on. A

¹U. S., Senate, Subcommittee on Disarmament, Committee on Foreign Relations, Chemical-Biological-Radiological Warfare and Its Disarmament Aspects, 86th Cong., 2d Sess., 1959, p. 27.

country, by giving up an invention over which it holds a monopoly, would be weakening its relative power position. Moreover, nations which do not yet have it may not favor controls until they, too, have developed it. This is the chief reason, of course, why France has strongly opposed a test-ban treaty. Paradoxically, as time goes on the pressure for an arms control agreement generally builds up in an area as the necessary control potential to sustain it diminishes. Already, this has been the experience with moves to ban atomic weapons and ballistic missiles and to prevent the spread of nuclear weapons to "Nth countries." Pending efforts to keep outer space from being militarized may well encounter the same paradox of failing to take action at the most propitious time.

Since control potential is largely a matter of the characteristics of the weapons themselves, there is little hope of strengthening it per se despite suggestions such as the proposal that states place a radioactive "signature" in their nuclear weapons to facilitate the identification of nuclear blasts. If the detectability of weapons cannot be improved on this side of the equation, then the best hope lies in improving the instruments and methods of detection.

The Methods of Inspection

Considerable attention has been given to research on the methodology of inspection during the last five years. Yet because of the dearth of experimentation and historical experience with this subject, scholars have been able to accomplish little more than the formulation of elaborate game theoretic models, most of which are far beyond the

boundaries of political realism.

Theoretically, the modes of inspection may be divided roughly into two categories: physical (focusing on physical objects, installations, and activities in an attempt to perceive violations as they take place) and non-physical or psychological (focusing on the collection of knowledge which people have about violations).¹ The schemes proposed for carrying out psychological inspection range from monetary rewards and the protection of informers in order to encourage citizens to report suspicious activities all the way to keeping a detailed record of the location and work of key scientists and using polygraph examinations of responsible decision-makers to get at the truth.² As yet, no official proposals embodying psychological inspection have been made although from a strictly technical point of view, such techniques possibly would be the most fruitful and reliable. In fact, as things stand now some form of interrogation of scientists and political leaders or voluntary reporting by nationals is the only conceivable way in which evasions can be turned up in areas where the control potential is extremely weak. But the other side of the coin is that if the idea of physical inspection is repugnant to nations, surely they would find psychological inspection all the more objectionable. Therefore, if there is ever an agreement on inspection, it will in all probability have to be implemented through physical methods.

¹ Louis C. Bohn, "Non-Physical Inspection Techniques," Arms Control, Disarmament, and National Security, ed. Donald G. Brennan (New York: George Braziller, 1961), p. 348.

² Besides Bohn's article, see Thomas W. Milburn et al., Summer Study on Arms Control, 1960: Non-Physical Inspection Techniques (Boston: American Academy of Arts and Sciences [1961]).

Thus the prospects of inspection will depend in large part on the capabilities of the data-gathering instruments used in detecting physical evidences of duplicity. Obviously, countries spend enormous sums of money experimenting with new ways of increasing the sensitivity of their own intelligence systems. For the most part, thought, they are reluctant in disarmament negotiations to talk about the technical apparatus they use in learning the enemy's secrets. Even so, there are indications that "scientific spying" has developed to a fantastically high level of competence. Many of these advances, of course, could be readily adapted to use in international inspection. For that reason, we must not take a static view of the present relatively backward state of inspection and control technology.

Already in a few areas the threshold of detectability has been expanded materially through systematic research, chiefly by the United States. Take the example of the problem of bootleg underground nuclear tests. Originally, an East-West conference of experts in August, 1958, proposed an elaborate worldwide verification system of 180 control posts. It was supposedly capable of detecting and identifying all nuclear blasts (other than those in outer space) above a one-to-five kiloton magnitude except for some 20 to 100 seismic signals annually which could be caused either by nuclear tests or earthquakes. Shortly thereafter, the United States upped to 1500 its estimate of the number of subsurface disturbances that instruments could not identify definitely as being man-made or natural.¹ In view of the technical deficiencies of the Geneva detection

¹The best source of data on the problems of nuclear-test detection

system, American policy at first was to ban only those tests with a seismic strength of 4.75 magnitude or over (about a 19 kiloton yield) and to require a network of 21 control posts and an annual quota of 20 on-site inspections on Soviet soil for the purpose of ensuring compliance.

Meanwhile, the United States in May, 1960, launched Project Vela, an extensive research program on seismic detection. Heretofore, total annual expenditures on seismological research in America amounted to a few hundred thousand dollars; the Project Vela budget for the 1961 fiscal year alone was more than sixty million dollars.¹ Resulting strides in the science of seismic detection enabled the United States to relent on several points it had previously adhered to firmly. In March, 1961, the Kennedy Administration reduced from twenty-one to nineteen the number of control posts proposed for Soviet territory. In March, 1962, the threshold of 4.75 seismic magnitude was dropped entirely so that all underground tests would be prohibited by the treaty at the outset.²

Following the release of the preliminary findings of Project Vela on July 7, 1962, further American concessions were made on the basis of the discovery that seismic instruments could do a better job of detecting

is U. S., Congress, Joint Committee on Atomic Energy, Hearings, Technical Aspects of Detection and Inspection Controls of a Nuclear Weapons Test Ban, 2 parts and summary analysis, 86th Cong., 2d Sess., 1960.

¹ "White House Statement Regarding Research and Development Program on Detection of Underground Nuclear Explosions, May 7, 1960," in Documents on Disarmament, 1960, p. 36.

² International Negotiations, p. 53.

and identifying underground disturbances than had been assumed earlier.¹ In particular, it was found that signal detection capability could be multiplied five to ten times by placing seismometers thousands of feet deep in abandoned cased oil wells or on ocean bottoms. Research also indicated that there were substantially fewer earthquakes that could be mistaken for underground nuclear explosions than originally expected because, among other reasons, "man-made explosions occur within a mile or so of the surface and earthquakes usually originate at depths of several miles or greater."² In the light of this new scientific information, the United States now agreed that: (1) "substantially fewer" than the originally proposed 180 detection stations would be needed to develop a world-wide network of control posts; (2) this network "could be composed of internationally supervised national stations rather than of internationally-operated stations"; and (3) the number of on-site inspections could be reduced below the number (between twelve and twenty) originally proposed.³

Except for the quota of on-site inspections, this was a somewhat less extensive and penetrating control system than the one which the Russians had partially agreed to before they began a diplomatic backslide in the negotiations in March, 1961. Had the United States three or four years

¹"Department of Defense Statement on Project Vela, July 7, 1962," in ibid., pp. 246-248.

²Ibid., p. 248.

³"Informal Note Given Privately to Soviet Delegation by U. S. Delegation: U. S. Position on a Treaty Banning Nuclear Weapon Tests, August 6, 1962," in ibid., pp. 262-263. Subsequently in early 1963, the United States set a proposed quota of seven inspections for the Soviet Union.

earlier known as much about the technical characteristics of underground nuclear explosions and the methods of detecting them, a test-ban treaty might have been hammered out if, indeed, the Soviets had wanted to reach an agreement.

The case of the underground nuclear test control problem underscores an important point: While nations may not accept all the inspection that is technically possible, they also cannot agree on controlled disarmament measures which require a level of performance from inspection beyond the capacity of available methods. Thus the level of development of inspection technology is a limiting, but not a determining, factor in disarmament.

Besides bolstering the effectiveness of inspection by directing research toward the improvement of individual techniques, it is also possible to increase the level of performance of a verification system by using several different techniques to cross-check one another and to supplement the data collection process. Depending on what one is searching for, a mixed inspection system can utilize varying blends of the two types of physical inspection: aerial and ground.

Aerial Inspection

Aerial reconnaissance, a standard tool of national intelligence data-gathering, is perhaps the most tried and proven of all methods adaptable to international inspection and control. Certainly, it is the one in which the United States has the greatest confidence because its effectiveness in uncovering many different kinds of information relevant

to checking on compliance with a wide range of disarmament has been demonstrated over and over again.¹

The chief form of aerial inspection is, of course, aerial photography. The astounding capabilities of aerial photography are revealed by the fact that a single non-stop reconnaissance flight can photograph a strip 490 miles wide and 2,700 miles long (the distance from New York to Los Angeles).² Moreover, ground detail as small as one foot in size may be analyzed.³

There are other considerations which, at first sight, make aerial photography a desirable form of inspection. For one thing, it is simpler than most methods of verification that have been advanced. At the same time, it is also capable of covering the vast geographical areas that would be involved in any Russian-American disarmament agreement. Dr. Jerome B. Wiesner, Science Advisor to President Kennedy, estimates that an aerial survey of the 28 million square miles of territory of the Soviet and Western bloc nations would require 500 successful flights, about 180 reconnaissance aircraft, and around 1,500 photo-interpreters

¹ On the capabilities of air surveillance generally, see Constance B. Smith, Air Spy: The Story of Photo Intelligence in World War II (New York: Harper and Brothers, 1957). The reader will also find an impressive series of aerial photographs of Russian missile installations in Cuba taken in October, 1962, printed in Time, LXXX (November 2, 1962), 15-29.

² Mutual Inspection for Peace (no facts of publication indicated but apparently published by U. S. Government around 1955), p. 11.

³ U. S., Senate, Subcommittee on Disarmament, Committee on Foreign Relations, Hearings, Control and Reduction of Armaments, Part 5, 84th Cong., 2d Sess., 1956, p. 205. (Cited hereafter as Control and Reduction of Armaments.)

to analyze the data.¹ In addition, there would be less intrusion into the internal affairs of the countries being surveyed, probably resulting in a minimum of friction and discontent.

Nevertheless, aerial inspection has a number of shortcomings, other than strictly political ones, which seriously impair its usefulness in the verification of an arms limitation agreement. First, since the advent of the missile age, aerial surveillance is no longer as effective in providing advance warning of preparations for a surprise attack because fewer observable preparatory activities are required for launching a missile strike and because the speed of ballistic missiles has cut the maximum warning time down from three hours to between fifteen and thirty minutes. Inasmuch as the element of surprise would be overwhelmingly important in a deliberate nuclear bombardment, a potential aggressor might even forego the traditional process of mobilization to put the country on a war-footing in order to avoid tipping off the intended victim in advance. As Henry A. Kissinger puts it:

By their very nature, missiles can be launched without extensive preparation. In a few years, when solid fuel missiles become operational, they will require a countdown of less than ten minutes. In such circumstances, we can be certain that, whatever else may happen, a surprise attack will not be preceded by a tense situation. The last thing an aggressor would do is to alert our retaliatory force by disquieting us.²

Yet in pursuing such a strategy an aggressor would surely have to take

¹ Jerome D. Wiesner, "Inspection for Disarmament," Arms Control: Issues for the Public, ed. Louis Henkin (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1961), pp. 115-117.

² Kissinger, The Necessity for Choice: Prospects of American Foreign Policy, p. 21.

account of the possibility that the "knock out punch" might not do the job. To deal with this contingency, some advance arrangements, if only stepped up civil defense preparations, appear essential. The point remains, however, that the preparations for a major war, given the present state of semi-mobilization, are less detectable than in any previous period in history.

The utility of aerial inspection has also been reduced by the creation of underwater and underground missile systems to make deterrent forces invulnerable. If, for instance, the United States and the Soviet Union agreed to a ceiling on the number of delivery vehicles they would keep on hand, aerial photographic surveys would be an undependable mode of verification. "The task of spotting underground launching sites may be compared to the task of discerning manhole covers from 50,000 feet in the air."¹

Another point to consider is that the information derived from aerial inspection ostensibly for the purpose of forewarning defensive-minded states of the imminence of an attack can be just as useful to an aggressor in determining what targets to hit. The secret American U-2 overflights of Soviet territory between 1956 and 1960 illustrate this point:

Although the U-2 program was justified in terms of gaining protection against surprise attack, the kind of information it evidently secured--for example, the construction

¹ Walter J. Levison, "Capabilities and Limitations of Aerial Inspection," Inspection for Disarmament, ed. Seymour Melman (New York: Columbia University Press, 1958), p. 74.

of missile bases--could not give tactical early warning of a Soviet surprise attack in the missile age. On the other hand, this kind of information could be useful for an American surprise attack.¹

The declining functional value of aerial inspection is but one of the drawbacks to its use in the verification of arms control agreements. The difficulty of working out the details of its operation is another. Although one of the least complicated and least interfering forms of inspection, aerial reconnaissance nonetheless has raised an assortment of difficulties when it came to working out a practical detailed plan of implementation. Consider, for example, some of the questions that might arise under the 1955 American proposal to permit the United States and the Soviet Union to carry out an aerial survey of each other's territory as a means of verifying the veracity of information received from an exchange of "blueprints of military establishments."² Especially in a crisis period, how could the host country be sure the reconnaissance aircraft were not loaded with nuclear weapons? If, to allay these fears, the host country were permitted to inspect the aircraft before their use in overflights, how could stalling or long delays be prevented? Could these overflights be regulated by the host country so as not to interfere with its own civil and military aviation traffic? If so, would the regulations not be designed to frustrate the aerial survey? In the

¹Robert E. Osgood, "Stabilizing the Military Environment," American Political Science Review, LV (March, 1961), 39.

²Details proposed by the United States for an operational plan of aerial inspection is covered in U. S., White House Disarmament Staff, Fact Sheet on Aerial Inspection, Disarmament Background Series, No. M-9, September 28, 1957; and "United States Outline Plan for the implementation of President Eisenhower's Aerial Inspection Proposal, Submitted to

event of unfavorable weather conditions, would overflights other than those already arranged be allowed? Should a reconnaissance plane crash, how would the situation be handled? Would foreign military bases be included in the surveillance project? Would the host country be granted access to the material gathered by the flights over its territory? Above all, could an operational plan be drawn up so that neither side realized greater gains than the other from the aerial survey project?

These issues suggest the kinds of difficulties that almost certainly would crop up in any situation where hostile states attempt to stabilize their military relations through the use of reciprocal aerial inspection to reassure one another. Because of political distrust, such agreements require that all the ground rules be made explicit and unambiguous as possible to prevent the parties from taking advantage of loopholes or gaps.

Since 1960, a novel dimension--satellite surveillance systems--has been added to aerial inspection. The United States has under way two top-secret projects: SAMOS (Satellite and Missile Observation System) whose function is to watch for the buildup of dangerous concentrations of troops and armaments and other sudden military activity, and MIDAS (Missile Defense Alarm System) whose function is to detect missile launches with infra-red sensing instruments. One unofficial estimate is that SAMOS can distinguish twelve inch objects against a contrasting

the Disarmament Subcommittee, August 30, 1955," in Documents on Disarmament, 1945-1959, I, 501-503.

background from 300 miles out in space.¹

That this technological breakthrough will have far-reaching political implications for American and Soviet positions on international inspection is readily apparent. No longer will a formal agreement be absolutely necessary in order for inspection to legally take place; the United States can inspect the Soviet Union serially whenever it wishes and vice-versa. Thus the negotiations on inspection and control may become antiquated. Or, conversely, the prospects for an agreement on international inspection and control may be substantially improved if the military advantages from extreme secrecy now enjoyed by the Soviets were neutralized by American satellite reconnaissance.

To sum up, while aerial inspection has not entirely outlived its usefulness in the verification of disarmament, it cannot very well monitor compliance with those kinds of arms control measures which appear to be the most technically feasible at the moment. It can, however, be effectively employed to supplement ground inspection which evidently will have to bear the brunt of the burden of verification.

Ground Inspection

Paradoxically, although ground inspection has been the main component of most of the proposed control systems for disarmament, it is infinitely more complicated than other alternative methods. This is not surprising because the face-to-face confrontation of the inspectors and the inspected takes place in the same climate of fear and distrust which

¹Robert Strother, "Space Cameras on Peace Patrol," Reader's Digest, LXXX (January, 1962), 109.

the control apparatus was created to deal with in the first place. Because of the inherent adversary relationship, contradictory pressures are at work. The inspectorate attempts to learn as much as possible and the national population strives to divulge as little as possible. In the eyes of the inspectorate, any facility off-limits to inspection looks suspicious because illicit activities may be going on within it. By the same token, a nation, even though intent on keeping its treaty commitments, almost certainly will refuse to grant the degree of access required if the inspection system is to provide a maximum level of assurance.

Because of its negative connotations, some thought has been given to the possibility of minimizing the interference of ground inspection in internal affairs by making use of unmanned automated detection equipment wherever possible. For instance, the United States has investigated the feasibility of a network of unmanned seismic stations to detect underground nuclear tests.¹ Yet at best the role of technical gear in ground inspection is secondary. The human element is primary because the essence of this kind of verification is permitting trained observers on-the-scene access to see for themselves what is going on and then to make a report of their findings. The fact of the matter is that technical instruments can oftentimes record indications of suspicious activity but rarely are these indications conclusive enough to establish beyond a reasonable doubt that a violation has occurred. Such a determination

¹New York Times, February 18, 1960, p. 1.

frequently has to be a matter of judgment and interpretation of ambiguous situations by inspection teams.

During the course of the postwar disarmament negotiations, two basically different approaches to ground inspection have been advanced: horizontal (broad scope) and vertical (narrow scope). Rather than two sharply defined types, these approaches more accurately can be thought of as representing the two extremes on the continuum of inspection. They are treated separately here in order to distinguish broadly between plans emphasizing maximum inspection and those emphasizing minimum inspection.

Horizontal Inspection

The underlying premise of horizontal inspection is that effective verification requires that the inspectorate be granted virtually unlimited access rights in a country. Except for perhaps a minimum number of specified restrictions, the inspectors would have the prerogative of going anywhere and investigating anything if directed by the control organization to do so. The justification for investing the inspection system with broad discretionary powers was summed up pointedly by James G. Wadsworth in his rebuttal to Andrei Vyshinsky's remarks on the subject during the disarmament negotiations in 1954:

[Vyshinsky]: During the last World War, even button factories--at least in my country--began to make weapons to fight Germans, and they did so successfully. Do you suggest that with a view to the reduction of armed forces and armaments we have to supervise every factory making buttons for ladies' suits and men's trousers?

[Wadsworth]: Mr. Vyshinsky pointed out yesterday that during the war certain button factories in the Soviet

Union manufactured munitions. This, I can assure him, is quite parallel to the history of the United States industry during the war--and indeed that of most of the countries in the war. The international control commission must, therefore, in our view, have the right to inspect button factories in order to determine whether or not they are manufacturing munitions. That is precisely what the Soviet representative denied to us during the London talks. . . . If . . . we correctly interpret Mr. Vyshinsky's statement yesterday, any country can frustrate the international inspection simply by posting a sign reading: "Keep out. This factory is making buttons."¹

If the sole consideration in designing a verification system were to make it rascal-proof, then unlimited inspection would be quite sensible. Indeed, there are indications that this was the criterion that shaped United States policy at least until the mid-1950's. Consider the broad mandates American proposals gave to the control mechanism. The Atomic Development Authority, under the Baruch Plan, was to have the right of "the unhindered movement of its personnel in and between installations and to any other points, across and within national boundaries in connexion with the proper discharge of their functions."² Much like the Baruch Plan in the scope allocated to inspection was the second major American proposal of the Cold War--a scheme in 1952 for the disclosure and verification of armed forces and armaments. Inspection, in effect, was to be unencumbered:

¹Bernhard G. Bechhoefer, "Negotiating with the Soviet Union," Arms Control, Disarmament, and National Security, ed. Donald G. Brennan (New York: George Braziller, 1961), p. 273.

²"United States Memoranda on the Proposed Atomic Development Authority, Submitted to Subcommittee I of the United Nations Atomic Energy Commission," in Documents on Disarmament, 1945-1959, I, 35.

It is essential to an effective system of verification that the international inspectors, in addition to examining declared installations and facilities, be permitted in all stages to have access to the entire national territory in order that the Commission may determine within reasonable limits the accuracy and adequacy of the information disclosed.¹

But more directly to the point, both plans were drawn in such a way that either the control agency or some other international body, not the national governments involved, would have the final say in borderline areas where the jurisdiction of the control system was disputed or needed clarification. For all practical purposes, that would have meant the surrender of national sovereignty. This fundamental point must be borne in mind: There is no half-way house of national sovereignty; there is rather a threshold, a "Rubicon that divides the Gaul of basically untrammelled national sovereignty from the Tuscany of meaningful supranational authority."² Clearly, horizontal inspection is better adapted to the ecological climate of Tuscany than Gaul.

In general, although a higher level of assurance and reliability can be gained from saturation inspection, the price is political unacceptability. To arrive at an agreement on inspection, therefore, necessitates balancing the competing demands of reliability and acceptability. In the Western mind, too often only the first facet of the problem--

¹"United States Working Paper Submitted to the Disarmament Commission: Proposals for Progressive and Continuing Disclosure and Verification of Armed Forces and Armaments, April 5, 1962," U. N. Document DC/C.2/1 in ibid., p. 351.

²Lincoln P. Bloomfield, "Arms Control and World Government," World Politics, XIV (July, 1962), 641.

reliability--has commanded serious attention. The resultant attitude has been marked by the rule of the thumb that "the more inspection there is, the better." But surely it is a fanciful notion to expect any nation to allow armies of inspectors to roam around the countryside at will, "turning every stone" in search of disarmament violations. Such a deep penetration of national life by outsiders would be obnoxious to Communist and non-Communist countries alike, which raises grave doubts concerning the willingness of the United States in the end to submit to the maximum controls it has proposed with the Soviet Union in mind.

The incompatibility of horizontal inspection, in theory, with a community of sovereign states can be clarified further by shifting our attention from the level of abstractions to the level of the practical details of the operation of this concept. Since horizontal inspection has never actually been employed in the relations of nations, it is necessary that we visualize a hypothetical situation which, of course, is entirely conjectural.

First, there is the question of how such a large-scale inspection operation could be staffed and organized. Seymour Melman estimates conservatively that between fifteen and thirty thousand people would be needed for 100 per cent inspection of the declared production facilities in the United States turning out conventional and nuclear weapons and delivery systems.¹ Not included in Melman's estimate are the inspectors needed to cover the laboratories capable of manufacturing chemical

¹ Melman, Inspection for Disarmament, p. 49.

and biological weapons, to monitor nuclear and missile tests, and to search for undeclared clandestine installations. Engaged in the missile industry alone in the United States are about 4,500 plants and 200,000 subcontractors.¹ Keeping tabs on possible questionable activities of these many thousands of production units would indeed be an ambitious, if not impossible, undertaking.² While no data are available on what the comprehensive inspection of the Soviet Union would require, a safe guess is that the process would be at least as arduous in view of the Soviet aversion to foreign intrusions.

Even if it were feasible to blanket the entire country with inspectors, the problem of recruiting enough qualified experts to do the job would still remain. For three reasons, at least, the supply would not equal the demand. First, the inspectors, for the most part, would have to be highly trained engineers, scientists, and technicians, and these are in relatively short supply the world over. The special qualities attributed to the inspectors in the scheme of things, indeed, place them in a position not unlike the guardians in Plato's Republic. Second, there is an even more critical shortage of technical experts in the uncommitted nations that would be called upon to provide inspectors if impartial observers were being used. Third, in the phraseology of the Acheson-

¹John B. Phelps, "Some Problems of Missile Production Inspection," Arms Reduction: Program and Issues, ed. David M. Frisch (New York: Twentieth Century Fund, 1961), p. 116.

²Phelps concludes that "records and on-the-spot facility inspection are probably not adequate to prevent clandestine missile production in the kinds of 1965 technology, stabilized deterrent, limited trust situations ordinarily envisioned." Ibid., p. 120.

Lilienthal Report, "the work itself, which would be largely policing and auditing and attempting to discover evidences of bad faith, would not be attractive to the type of personnel essential for the job. The activity would offer the inspectors a motive pathetically inadequate to their immense and dreary task."¹

Second, there is the question of the deleterious effect of horizontal inspection on national secrecy and security. Governmental secrecy is a universal phenomenon; it is not a characteristic of Communist regimes alone as is sometimes assumed. Access to certain information is restricted by all governments on the ground that if it were general knowledge, national security would be compromised. Secrecy, in other words, is an important element in the relative power position of any nation. It may enable a nation to appear more powerful militarily than it really is; it denies to the enemy the fruits of one's own military research; and, more importantly, it frustrates the offensive and defensive military planning of one's adversary. Obviously, the Soviet Union relies more heavily on the security advantages derived from secrecy than does the United States. Nevertheless, the United States, too, regards secrecy as a vital military asset. Is it not therefore patently unrealistic to expect states to hand the inspectorate a carte blanche allowing entree to highly classified materials? If they did so, it might entail, among other things, "the virtual abolition of security classification and with them security checks, and investigations, and

¹U. S., Department of State, A Report on the International Control of Atomic Energy, p. 7.

prosecutions for espionage and related crime."¹ This, in turn, presupposes a different hierarchy of individual loyalties than the one presently prevailing in which allegiance to the nation is at the apex.²

Indiscriminate ground inspection, much like aerial inspection, may also impair national security in a framework of partial disarmament by disclosing too much information.³ Data such as the size, location, and state of readiness of a nation's retaliatory forces in the hands of the enemy would induce more, not less, instability in the military environment because of increased vulnerability to a surprise attack. Truly, one of the most perplexing dilemmas of the concept of inspection concerns the proper output level of information. An inspection system yielding too much or too little data could have equally hazardous consequences.

Third, there is the question of the impact of horizontal inspection on industrial and commercial secrets.⁴ Although less serious than the threat to national military secrecy, inspection on a large scale would undermine competitive economic processes. Particularly in the

¹Louis Henkin, Arms Control and Inspection in American Law (New York: Columbia University Press, 1958), p. 155.

²Robert H. Cory, Jr., "International Inspection: From Proposals to Realization," International Organization, XIII (Fall, 1959), 498.

³"Imagine the state of tension that could occur if either side's strategic-force personnel began to suffer a severe epidemic that threatened to immobilize them temporarily before the eyes of the other's inspection." Thomas C. Schelling, The Strategy of Conflict (Cambridge: Harvard University Press, 1960), pp. 243-244.

⁴Melman, Inspection for Disarmament, p. 46.

United States, industrial firms go to great lengths to keep their secrets from one another because this is sometimes the critical factor determining profit or loss. Although there seems to be little doubt as to the need for safeguards to prevent the inspection agency from abusing its authority in this area, effective limitations can hardly be devised without at the same time so restricting the inspectorate that it cannot efficiently perform its function.

Fourth, there is the question of the "irritation hazards" growing out of the operation of horizontal inspection.¹ Sometimes it is taken for granted that inspection, horizontal or vertical, is bound to diminish tension and for that reason should be vigorously pursued. Just as likely, however, is the possibility that the inspection process may aggravate existing tensions and distrust and lead to a situation much worse than the status quo ante, perhaps even resulting in a war. Moreover, the greater the degree of penetration by the inspection system, the more potential points of friction there undoubtedly will be. Thus the amount of resentment aroused would vary in direct proportion to the extent of the interference in the internal affairs of a country. To cite a far-fetched hypothetical case, suppose the United States and the United Kingdom decided to station on each other's territory several thousands of inspectors assigned the task of checking compliance with some pre-determined military force levels. It is not difficult to visualize the

¹Donald G. Brennan, "Setting and Goals of Arms Control," Arms Control, Disarmament, and National Security, ed. Donald G. Brennan (New York: George Braziller, 1961), p. 37.

animosities bound to be stirred up by the inspection teams as they move about energetically carrying out their duties. Clearly, even if the roadblocks to inspection are eventually removed, nations will still have to resolve a variety of mechanical and operational difficulties, many of which cannot now be anticipated.

We began our analysis of ground inspection by first examining the horizontal concept because of the implication in United States policy that it is the most preferable or ideal approach and that Soviet intransigence is mainly responsible for its failure to materialize. The evidence, as we have seen, strongly disputes that premise and suggests, to the contrary, that the mechanical and operational complications inherent in horizontal inspection are, in themselves, enough to make it unworkable and therefore unnegotiable. Hence, the conclusion seems warranted that consistent with the control objectives being implemented, the less broad in scope inspection has to be, the better.

This raises the fundamental question of whether it is, after all, necessary to know everything about the military resources of one's adversary in order to participate in an arms control venture without incurring undue security risks. The answer, of course, depends on the nature of the disarmament commitment. Unquestionably, "general and complete disarmament" or even a low-level deterrent arrangement permitting each side, say, 200 delivery vehicles (missiles and bombers) entails a high magnitude of inspection. But for reasons already discussed, such drastic solutions to the armaments problem (as well as the inspection arrangements for administering them) are not to be taken

seriously during the foreseeable future.

That leaves two main areas of arms control where progress is possible within the existing international political matrix, neither of which requires extensive ground inspection. The first area is concerned with increasing the flow of reliable, reassuring information between enemy nations, enabling each one to better assess the intentions and behavior of the other and thus to maintain a more relaxed military posture. Strictly speaking, a government's intentions or motivations are intangible and therefore cannot be verified as such by inspection. Even so, inspection can provide cues useful in anticipating major military actions of a state. An inspection system for this purpose need not be nearly so intricate as one designed to ascertain precisely what armaments and forces a state possesses. In the second area the task of inspection is more particularistic in that it involves the verification of compliance with relatively small treaty restraints on national military capabilities--the so-called "gateway" measures to disarmament such as a nuclear test ban. Here, too, the demands on inspection are slight because arms regulations of this type do not affect national security as profoundly as more drastic ones and because only a few activities and installations have to be monitored. Hence, it appears that minimal or vertical ground inspection is the optimum form of control for a variety of disarmament projects. This proposition is analyzed in detail in the pages that follow.

Vertical Inspection

At the heart of the idea of vertical inspection is the principle

that inspection need not be diffuse in order to be effective--that it can be restricted to explicitly defined 'rights-of-way' within a country and still function properly. It is assumed that the quality (reliability) and quantity (scope) of inspection are not directly proportional to one another. Consequently, the main distinction between this approach and the horizontal one discussed above is that in the latter case the control agency has access to everything in a country other than specified exemptions while in the former case all areas and facilities are placed off-limits to the inspectorate except those that are specifically designated in the treaty.

The proposal to confine inspection to certain prescribed control points is opposed mainly on the grounds that it hampers the gathering of legitimate information needed for verifying compliance with treaty commitments and leaves the inspectorate with insufficient freedom of action to deal with deliberate, systematic evasion attempts. If practical political realities could be ignored, a broad, elastic construction of the powers of the control institution might be very desirable to guard against this contingency. But an equally urgent point is the simple truth that inspection procedures must be in accord with the political facts of life.

In three important respects the vertical approach to inspection seems to be politically consistent with the existing structure of international relations. First, it leaves national sovereignty intact since the control agency would not be empowered to impose its will on a national government. Rather than wielding discretionary authority, the controllers would act in accordance with ground rules spelled out in

detail in the treaty from which the signatories could withdraw at any time. Second, it entails relatively little direct interference in the domestic affairs of a nation because all but a few facilities and activities were barred from inspection. Third, it is less likely to yield sensitive information not directly relevant to the implementation of a disarmament treaty.

If vertical inspection is politically feasible, then what about its operational capability? Perhaps a better assessment can be made within the context of two specific plans that have been presented in the negotiations: the Russian scheme for "crossroads" inspection and the American blueprint for monitoring a nuclear test ban.

"Crossroads" inspection.--The idea of vertical inspection first received consideration in the disarmament negotiations in May, 1955, when the Soviet Union proposed, as an integral part of a "package plan" of partial measures, that stationary control posts be established "at large ports, at railway junctions, on main motor highways and at aerodromes" for the purpose of forewarning states of the enmassing of conventional forces and armaments as a prelude to a surprise attack.¹

¹ "Soviet Proposal Introduced in the Disarmament Subcommittee: Reduction of Armaments, the Prohibition of Atomic Weapons, and the Elimination of the Threat of a New War, May 10, 1955," in Documents on Disarmament, 1945-1959, I, 466. Subsequently, at the Surprise Attack Conference of 1958, the Russians omitted airfields from the list of checkpoints. As late as 1961, they were still supporting this plan. See "Soviet Memorandum Submitted to the General Assembly: Measures to Ease International Tension, Strengthen Confidence among States, and Contribute to General and Complete Disarmament, September 26, 1961," in U. S., Arms Control and Disarmament Agency, Documents on Disarmament, 1961, Arms Control and Disarmament Agency Publication No. 5 (Washington: U. S. Government Printing Office, 1962), p. 504. (Cited hereafter as Documents on Disarmament, 1961.)

Unfortunately, the fine points of this plan were never fully clarified, but apparently the observers were to be confined to transportation and communication nerve centers and could not move about at random in search of suspicious activities--thus the term "key checkpoint" or "crossroads" inspection.

However, the Soviets did fill in a great many details in their proposal at the Surprise Attack Conference in late-1958. In all, eighty-two ground control posts were proposed for nineteen Western and Soviet bloc countries.¹ Each post was to consist of three or four control officers from each side, auxiliary personnel composed of the nationals of the host country and a post commander appointed from the military alliance to which the inspected country belonged. Their duties included:

- keeping direct visual watch on the movement of troops and the movement of technical and other military equipment through railway junctions, major ports and on main roads;
- keeping watch on the preparations for putting out to sea of naval surface craft and submarines, as well as of troop transports with troops or on any concentration of such ships in major ports.²

¹ Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Rumania, and Russia; Belgium, France, Federal Republic of Germany, Greece, Iran, Italy, Luxembourg, Netherlands, Turkey, United Kingdom, and the United States. Of the 82 control posts, 54 were to be located in the countries of the Western alliance and 28 in Soviet bloc states. Six control posts each were to be situated within the United States and the Soviet Union. ("Declaration Submitted by the Soviet Government at the Geneva Surprise Attack Conference: Measures for Preventing Surprise Attack, November 28, 1958," in Documents on Disarmament, 1945-1959, II, 1267.)

²"Soviet Bloc Proposal at the Geneva Surprise Attack Conference: The Tasks and Functions of Ground Control Posts and Aerial Inspection, December 12, 1958," in ibid., p. 1300.

Significantly, reports from the control posts were to be transmitted through the communication facilities of the country being inspected in a code known to all of the participating states.

The "crossroads" inspection idea evoked little enthusiasm from the United States, mainly for two reasons. In the first place, American officials felt that the Soviet proposal, limited to monitoring conventional forces, ignored the principal source of the danger of a surprise attack, namely, nuclear weapons and the vehicles for delivering them.¹ Underlying this view was the assumption, referred to earlier, that the outcome of a major war, if it comes, will be determined by nuclear strike forces that can be unleashed suddenly without much pre-attack activity. Even if it were possible to mobilize conventional forces on a large scale without forfeiting the advantages of surprise, there is doubt that they would be needed for the occupation of areas subsequent to a strategic nuclear attack because of the virtually total destruction that would be inflicted. While the arguments are reasonable, they ought not to be accepted uncritically, as we shall see shortly.

The United States was also skeptical of "crossroads" inspection because of the stringent limitations placed on the activities of the control officers. Potential evaders were presented with too many tempting opportunities. What would prevent a country intent on mobilizing secretly for war from moving men and materiel by way of highways,

¹"Statement by the United States Representative (Lodge) to the First Committee of the General Assembly, December 9, 1955," in ibid., I, 577.

airports, railroads, and seaports not covered in the agreement? Because the control commissioners evidently would be permitted to view the traffic passing through the key checkpoints but not to closely inspect any cargo, military shipments might be camouflaged without arousing suspicions.

Moreover, American skepticism was compounded by the emphasis given in the Russian plan to the use of nationals of the inspected country to fill most of the staff positions of the control posts. As William C. Foster, head of the United States delegation to the ill-fated Surprise Attack Conference, saw it the Soviet scheme was tantamount "to self inspection. It would afford no indication--or at best only the most unreliable indication of the imminence of surprise attack."¹

Clearly, the Soviet formula for "crossroads" inspection was defective as far as American interests were concerned. Because unacceptable political strings (the thinning out of forces in Western Europe and so on) were attached and because the procedures to be followed were not set forth precisely, the American response could hardly have been otherwise. In terms of the principle involved, however, the Soviet approach was quite sensible and, in retrospect, should not have been passed over lightly. Indeed, it still represents one of the most constructive ways yet proposed for handling inspection in situations where a high degree of preciseness and sensitivity in the control system are not imperative, and thus merits serious attention.

¹"Statement by the United States Representative (Foster) at the Geneva Surprise Attack Conference, December 18, 1958," in ibid., II, 1323.

Although not well-suited for verifying specific disarmament measures, "crossroads" inspection could aid in the communication of the kind of information between the United States and the Soviet Union which is basic to the stability of their military relations. As we have already seen, an inspection system yielding excessive information (that is, data useful in targeting and drawing up war plans) can be detrimental to the security of any state. Contrariwise, it is also evident that absolute secrecy heightens feelings of insecurity and distrust between nations. Lack of certainty about what the opponent is doing or about his probable future intentions obliges a country to err on the side of caution--to impute to the enemy aggressive designs and a level of military capability which, in fact, he may not have.¹ This, in turn, tends to trigger a military buildup beyond the level really necessary and leads to an overall intensification of the arms race that possibly could have been averted. The "missile gap" supposedly experienced by the United States in the late-1950's and early-1960's is a case in point. Fearing a Soviet lead in the production of intercontinental ballistic missiles, the United States embarked upon a crash program to catch up. But as it turned out, the gap was apparently nonexistent.² So at least

¹Donald G. Brennan "The Roles of Inspection in Arms Control," Summer Study on Arms Control, 1960: Collected Papers (Boston: American Academy of Arts and Sciences, 1961), p. 247. (Hereafter cited as Summer Study on Arms Control, 1960: Collected Papers.)

²Soviet ICBM strength for mid-1961, according to national intelligence estimates in September, 1951, was a mere fraction (3.5 per cent) of the level originally anticipated for that date by 1959 estimates. (Stuart Symington, "Where the Missile Gap Went," The Reporter, XXVI [February 15, 1962], 22.)

on a rational plane, it would seem that the Russians have a vested interest in increasing the flow of dependable, reassuring information beyond that which is currently available through regular diplomatic channels, publications, and cultural exchanges.¹

Whether it was intended to do so or not, their "crossroads" inspection offer could have partially served this purpose, assuming, of course, agreement upon effective operational procedures. Notwithstanding the derogation of the inspectors to a strictly passive, observatory role, they could have reported generalized impressions about the level of military activity as evidenced by the kind and amount of traffic through the key transportation junctions where they were stationed.

It is reasonable to assume that secret preparations for all-out war (and that is what we fear most) even in the nuclear age cannot be concealed completely in a closed society, let alone an open one. In the process of girding itself for a military adventure, a government very likely would activate some type of mobilization program, however slight or discreet, which would to some extent disturb the rhythm of the nation's normal peacetime life. Military conscription might be stepped up; cities might be evacuated or civil defense preparations might be suddenly put into high gear; the key decision-makers of the country might be abruptly called together for a conference; production of war matériel might be speeded up; or there might be extensive redeployment of armaments and troops. Such indirect indications of a possible mili-

¹John B. Phelps, "Information and Arms Control," Summer Study on Arms Control, 1960: Collected Papers, p. 257.

tary threat can be monitored effectively by properly designed inspection arrangements employing the "crossroads" principle. Other than the control stations at strategic transportation junctions proposed by the Soviets, observers might be posted at additional key points depending on what they are supposed to watch for. Conceivably, for example, inspectors might even be stationed, on a reciprocal basis, at such obvious points as outside main government buildings for the purpose of checking on the coming and going of political leaders.

The fact that the approach just outlined concentrates on indirect or circumstantial evidence gives it two important advantages over horizontal inspection methods in which direct evidence is gained through the physical inspection of factories, weapons, and the like. In the first place, a way is provided whereby enemy states can convincingly demonstrate to one another that they are not about to launch or to threaten a massive attack without the necessity of disclosing precise data about military strength, weapons designs, and the location of missile emplacements.

In the next place, the implementation of "crossroads" inspection would not drastically alter traditional practices in the relations of nations. Traditionally, of course, diplomatic legations have collected a considerable amount of the type of information that would be yielded by "crossroads" inspection. In particular, this has customarily been the duty of the various military, economic, and cultural attaches stationed in foreign capitals. Sometimes the host country actually facilitates the data gathering process. The Soviet May Day military parades are but one example of how nations exhibit their military might before

one another. Ultimately, then, what "crossroads" inspection amounts to is simply a broadening of well-established practices in two ways. First, a formal institutional framework would be set up and, second, more strategic points would probably be opened to observation than are now available to diplomats.

Despite the desirable mechanical and operational features of "crossroads" inspection, care should be taken not to overestimate the level of performance that can be expected from it. It should be borne in mind that the successful operation of such a system depends to a great extent upon the active cooperation of each country submitting to inspection. Consequently, there appears to be no way of forestalling the obstructive tactics of governments desiring to hide something from the observers in violation of the inspection ground rules. Yet it may be possible to devise a precise and detailed set of operational procedures which, if not observed, would automatically be regarded as a breach of the agreement. In the event that a country withdrew from the inspection system or seriously interfered with its functioning, this would serve as a signal to the other participants to take countermeasures to protect their security.

Perhaps the greatest risk involved in "crossroads" inspection is not obstruction by host governments but rather the danger that the inexact information produced by it will be misinterpreted. Henry A. Kissinger has warned that the fragmentary information inevitably generated by the inspection process may well provoke more doubts and anxieties than

it settles.¹ Where war-and-peace decisions have to be made almost entirely on the basis of the inspection data, false alarms and consequent rises in the tension level are likely. But if the reports of the observers were used to supplement the materials gathered unilaterally by national intelligence agencies, they would tend to have a reassuring effect if they confirmed evidence from other sources that the enemy was not preparing to attack.

Nuclear test ban inspection.--In addition to surprise attack prevention schemes, the principle of vertical ground inspection has been utilized in the design of control machinery to monitor the cessation of nuclear weapon testing. A glance at the complications of on-site inspections to safeguard a ban on subsurface tests reveals why this approach is preferable to more pervasive methods. To provide near-perfect assurance, an investigation team would have to be dispatched to the spot to check on every suspicious earth tremor. There they would first scrutinize a sizable area by using aerial and ground techniques to fix the exact location where the underground disturbance probably occurred. Next, they would commence deep drilling operations in order to collect a sample of the radioactive debris from the nuclear detonation if, in fact, one had taken place.

Based on the assumption that the search could be narrowed down to a radius of 500 feet, it was estimated in hearings before the Congressional Joint Committee on Atomic Energy in 1960 that for 100 per cent

¹Henry A. Kissinger, "Controls, Inspection, and Limited War," The Reporter, XVI (June 13, 1957), 16.

coverage of the area it would take 63 holes for a 1.7 kiloton yield explosion at a depth of 2,700 feet (costing \$135,000); and 4 holes for a 100 kiloton yield explosion at a depth of 4,700 feet (costing \$94,000).¹ These estimates are conservative ones since they apply only to ideal geological conditions. It should be kept in mind, too, that the figures cited are for a single inspection. American officials revealed in 1963 that Project Vela studies of the frequency of earthquakes larger than magnitude 4.0 (which is equivalent to a 2 kiloton explosion) showed that about 30 seismic events having all of the earmarks of nuclear detonations occur each year in the Soviet Union. On the average, 140 other earth shocks, which cannot be definitely established as earthquakes on the basis of seismic evidence alone, are also recorded.² Clearly, the inspection of all of these signs of possible violations, even if it were politically acceptable, would be an unmanageable task.

Some sort of minimal control apparatus therefore seemed to be the most feasible alternative. In an effort to reach an agreement, the United States became increasingly committed to this philosophy which was reflected in its proposals. They placed two main limitations on on-site inspection: First, the number of inspections in any given year was restricted to a set quota designed to permit the investigation of only a

¹U. S., Congress, Joint Committee on Atomic Energy, Technical Aspects of Detection and Inspection Controls of a Nuclear Weapons Test Ban: Summary-Analysis of Hearings, April 19, 20, 21, and 22, 1960, 86th Cong., 2d Sess., 1960, p. 49.

²U. S., Arms Control and Disarmament Agency, Why A Nuclear Test Ban Treaty? Arms Control and Disarmament Agency Publication No. 15 (Washington: U. S. Government Printing Office, 1963), pp. 28-29.

small fraction of the unidentifiable seismic events. Initially, American policy envisaged a total of twenty inspection missions annually in the Soviet Union, but in 1963 that figure was trimmed down to seven. Second, the criteria determining when and where inspection teams could be sent were spelled out strictly, leaving little room for discretionary judgments by the control administrator. Generally, where the location of seismic events was definitely established as being very deep (more than sixty kilometers) and when there were indications that the tremors were foreshocks or aftershocks of an earthquake, inspection was ruled out. Although all other seismic events were automatically eligible for on-site inspection, the access rights of the inspection groups were minimal. In cases where the epicenter (that is, the point on the earth's surface directly above the disturbance) was accurately pinpointed by control station measurements, the activities of inspection teams would be confined to an area of 200 square kilometers (or a radius of about eight kilometers). If seismographic readings did not precisely indicate the location, the areal limit would be 500 square kilometers (or a radius of about 12.5 kilometers).¹ Even under the earlier proposed quota of between twelve and twenty on-site inspections for the Soviet Union, "less than one part of 2,000 of Soviet territory would be subject to human inspection in any one year," according to Secretary of State Rusk.² It

¹"Western Draft Treaty on the Discontinuance of Nuclear Weapon Tests," April 18, 1961," in Geneva Conference, p. 505.

²U. S., Arms Control and Disarmament Agency, Address by Secretary of State Dean Rusk before the New Hampshire Council on World Affairs, Concord, New Hampshire, Saturday, June 16, 1962, Disarmament Document Series No. 79, n.d., p. 2.

would be much less under the revised quota of seven proposed in 1963.¹

Thus as envisaged by the United States, nuclear test ban inspection, instead of cutting horizontally across the whole of Soviet society, would be confined vertically to carefully defined areas where access is essential in order to verify compliance with the agreement. We have seen that American policy has tended to gravitate even further toward the minimal side of the scale of inspection over the years, raising doubts as to whether there is a viable middle ground between maximalist and minimalist, horizontal and vertical approaches to inspection. In retrospect, the amount of inspection and control provided for in the United States-United Kingdom draft treaty of April, 1961, was probably more than enough to deter the Soviet Union from cheating.² Yet it was far too little to guarantee with certainty that no violations had occurred. The plan, in short, had the disadvantages of both the maximalist and minimalist approaches but the advantages of neither. Faced with this dilemma, the Kennedy Administration opted in favor of curtailing inspection to the essential minimum in hopes of easing the way to the successful negotiation of an agreement with the Soviet Union. The hypothesis that a vertically organized verification system is compatible with Soviet interests, however, has not been borne out by the record of the negotiations, as logical as it may seem.

¹ Why a Nuclear Test Ban Treaty? p. 24.

² "Western Draft Treaty on the Discontinuance of Nuclear Weapon Tests, April 18, 1961," in Geneva Conference, pp. 475-521.

Two important findings of our study of the various problems posed by inspection methods should be emphasized in conclusion. First, ground inspection (mobile and stationary) forms the apex of the verification triangle; the other modes of information gathering make up the base. Presumably, the greater part of the data collected by aerial and ground-based detection instruments would indicate compliance with the disarmament agreement. But whenever there is evidence to the contrary, a follow-up probe by inspectors is needed to determine not only whether a violation has been committed but also the seriousness of the infraction, whether it was intentional or unintentional, and so on. Since a control system very probably will identify few unambiguous violations, the efficiency of the verification process depends ultimately upon human judgment and interpretation.

Second, the built-in difficulties involved in ground inspection can be attenuated, but not altogether removed, by employing vertical methods. The gains in mechanical feasibility from this approach, it is true, would be offset somewhat by the relatively weaker detection capability of the system, increasing the risks of the participants in an agreement. Quite possibly, however, the gains expected from the agreement may make the risks acceptable.

Needless to say, factors other than the scope of inspection enter into the calculation of these risks. Above all else, states cannot afford to stake their security on controlled disarmament unless they have confidence in the personnel responsible for the operation of the inspection machinery. Regardless of the complexity of the control system

contemplated, the fundamental issue is the same: "Whom can we trust to watch the man we suspect of wanting to kill us?"¹ In the next section we shall consider some possible answers to this perplexing question.

The Organization of Inspection

There are three alternative organizational concepts on which the design of inspection and control systems can be based: international, reciprocal, and national. In actuality, most plans include, to some extent, all three principles although one of them is usually considered to be the dominant or unifying theme of the organizational arrangement. But they are treated here as separate theories for purposes of clarity.

The International Principle

An impartial staff that is politically disassociated from the views and interests of the inspected states is the essence of an internationally-oriented inspection system. The job of superintending the implementation of disarmament would be entrusted to personnel drawn from either of two sources: an international civil service along the lines of the bureaucracy of the United Nations Secretariat or the so-called "uncommitted" nations.

From the outset of the postwar negotiations, the United States advocated the establishment of disarmament controls within an international framework. The Atomic Development Authority, conceived by the Baruch Plan, was to select its personnel on an "international basis" and to abide by Article 100 of the United Nations Charter which forbids receiving

¹ Aron, p. 136.

instructions "from any government or from any other authority external to the Organization."¹ At least constitutionally, the ADA was supposed to serve no partisan national purposes since it had authority not only to operate various atomic installations but also to expose and (through the Security Council) to punish violators. National governments, on the other hand, were bypassed in matters relating to atomic energy control. Given the supranational orientation of this scheme, the impartial principle of organizing controls was a logical corollary.

It soon became clear, however, that the conduct of international relations was not going to shift from a national to a supranational framework after all. Like other international institutions, inspection and control--if it were to become operable--had to be thought of as an adjunct to national policy-making. In this context, it could perform the vital, but limited, task of providing reliable and relevant information on which the participants in an arms control project could base their decisions as to whether the agreement was being fulfilled.

Even so, the United States continued to think in terms of an inspection and control organization more adapted to serving supranational than national purposes although this position gradually changed, as we shall see below. Basically, the strategy of the West was to ensure the impartial character of the verification process by seeking to separate the "political" from the "administrative" components of the control

¹"Second Report of the United Nations Atomic Energy Commission to the Security Council [Extract], September 11, 1947," in Documents on Disarmament, 1945-1959, I, 141.

system. This would be accomplished through a three-level organizational framework: (1) a general assembly of all parties to the treaty; (2) a smaller control council of major powers as permanent members, along with non-permanent members chosen periodically by the general assembly; and (3) a control administration headed by a single neutral administrator.¹

In theory, the control council would issue broad policy directives and the administrator, through his supervision of the day-to-day operation of the control machinery, would be responsible for carrying them out in an impartial manner. The effect, it was hoped, would be to insulate the field work of inspection and control from the disruptive influences of political conflict at the highest levels of the system.

An impartial staff may also facilitate inspection in other ways. For one thing, neutral inspectors are likely to arouse less resentment and suspicion in the host country than those who are nationals of an adversary state. Especially in situations where the inspectorate would come into intimate contact with the local population, such as interrogations of workers at defense plants, international personnel would be

¹The evolution of the Western conception of the institutional structure of inspection and control can be traced by examining the following documents: "French Working Paper Submitted to the Disarmament Subcommittee: Proposals Concerning the Structure of the International Disarmament Organization, September 2, 1955," in *ibid.*, pp. 503-506; "Anglo-French Working Paper on Control, Submitted to the Disarmament Subcommittee, May 3, 1956," in *ibid.*, pp. 615-622; Articles 2-9 of the "Western Draft Treaty on the Discontinuance of Nuclear Weapon Tests, April 18, 1961," in *Geneva Conference*, pp. 477-487; Stage 1(6) of the "Outline of Basic Provisions of a Treaty on General and Complete Disarmament in a Peaceful World--Submitted on April 18, 1962, by the United States . . .," in U. S., Arms Control and Disarmament Agency, *Second Annual Report to*

needed to do the job. Furthermore, the presence of neutral officials with a mandate from a large international organization may deter harassments by officials of the inspected country. Similarly, evidence of violations uncovered by an impartial inspectorate may be regarded as more credible and persuasive by other nations, thus providing a stronger basis for a collective international response. Finally, an international institutional arrangements is better adapted to the participation of a large number of states.¹

Conversely, there are a number of serious objections to setting up inspection and control within an international framework. One objection is that the negotiation of the details of the elaborate administrative machinery required is a formidable, if not entirely hopeless, task. Because dozens of points must be settled, there are correspondingly more potential points of friction and disagreement. Due to the antagonistic relationship between the negotiating sides, they more likely than not will take contradictory positions on these issues, if only to dramatize their cautious attitude toward the proposals of the enemy. By and large, this has been the experience of the test ban talks, to cite only one illustration.

Congress, January 1, 1962, December 31, 1962, Arms Control and Disarmament Agency Publication No. 14 (Washington: U. S. Government Printing Office, 1963), pp. 64-68; and "Draft Treaty Banning Nuclear Weapon Tests in All Environments, August 27, 1962," in *ibid.*, pp. 84-95.

¹Hans Linde, "Organization of a Mixed National and International Inspectorate," Verification and Response in Disarmament Agreements, Annex Vol. II, 73. See also Fred Iklé *et al.*, Alternative Approaches to the International Organization of Disarmament, Report No. R-391-ARPA (Santa Monica, Calif.: Rand Corporation, 1962).

A further objection is that an international system is deadlock-prone even though the inspection and control process is designed to be as automatic and immune from interference as possible. Without repudiating it outright, a major power might jeopardize the efficient operation of the system by simply refusing to approve the appointment of a control administrator or to pay its share of the budget. Thereby, the main issue (the failure to permit effective inspection and control) is obscured in a maze of legal argumentation, making it difficult to take decisive action against non-compliance. The history of the United Nations is instructive on this point.

A final objection to internationally operated verification systems concerns the tendency of neutrals to overlook or underrate evidence of discrepancies which show up. Lacking a vested interest in the security of the nations involved, they may be reluctant to report suspicious, but inconclusive, data which could cause a breakdown of the system and the resumption of activities prohibited by the arms control agreement. Just as the concept of the politically neutral public administrator is no longer generally accepted as valid, the American view of an "international inspectorate disciplined and constrained to a rigorous, exacting attitude toward empirical data irrespective of preconception and preferences" is also tenuous.¹ In the strictest sense, there is something to the Soviet assertion in 1951 "that while there are neutral states there are no--nor

¹ Charles B. Marshall, "A Primer on Inspection [Excerpt]," Verification and Response in Disarmament Agreements, Annex Vol. II, 99-100.

can there be--neutral men."¹

In short, from the vantage point of the security interests of the United States the dependability of inspection and control under international auspices leaves much to be desired. Nevertheless, this is precisely the form of verification proposed by most American disarmament plans. Beginning in the early 1950's, the United States, however, did insist on the use of its nationals in key positions during the inspection of the Soviet Union in order to guarantee the reliability of the results.² Yet, paradoxically, the international character of these personnel continued to be acknowledged. This was the first step in the development of the doctrine of reciprocal or adversary inspection.

The Reciprocal Principle

In reciprocal inspection the inspectors act as national agents--that is, they "report to, receive instructions from, and [are] replaceable by, their national government."³ In simplest terms, it means allow-

¹"Soviet Aide Memoire, June 4, 1961," in Geneva Conference, p. 339.

²In one of the earliest plans envisaging the control agency as an information-gathering rather than an enforcement mechanism--a plan for a Conventional Armaments Administration made up of Security Council members--it was stipulated that "Each member of the Administration should be entitled . . . to have a representative on each inspection team, except where a member of the Administration is itself being inspected. The State being inspected should be obliged to appoint a liaison officer to accompany the inspection team. . . ." (United States Paper Submitted to the Working Committee of the Commission for Conventional Armaments: Proposed Conventional Armaments Administration, June 22, 1950," in Documents on Disarmament, 1945-1959, I, 237.)

³Linde, p. 77.

ing the nationals of two states or blocs of states to inspect each other's territory on a reciprocal basis.

This type of control has five distinct advantages over the international principle:

1. It does not require a complex institutional structure and is therefore mechanically simpler to negotiate. Troublesome organizational questions such as the design of the components of the system, voting rights, staffing, and budgeting are avoided or at least minimized.

2. Since each side furnishes its own personnel and pays the costs of the inspection it conducts, the vulnerability of the control system to sabotage through indirect methods of obstruction is reduced.

3. By withholding from the inspected state details about the capabilities of the inspection system being used, potential violators never could be entirely certain of their ability to avoid detection.

4. National intelligence information could more readily be utilized to supplement the data acquired through inspection channels.¹ For instance, intelligence reports of suspected violations might be passed on to the inspectors who, within the limits of access allowed by the agreement, could investigate further.

5. Most important of all, the inspecting states have greater confidence in the findings of the inspection system because they exercise direct control over its operation:

¹Verification and Response in Disarmament Agreements, Annex Vol. II, 61.

If governments are going to have to base national decisions on evidence provided by the inspection apparatus, their judgments would be facilitated by the assurance that personnel on whom they could rely were participating in the collection process and transmitting their evidence, perhaps with critical appraisals attached, directly to their governments.¹

Despite the mechanical and operational advantages of reciprocal inspection, it is not feasible except where two conditions exist: The participating states must be few in number and organized into sides (as in NATO and the Warsaw Pact), and the inspection techniques should not involve extensive penetration into the internal life of a country.² It is a fanciful notion to presume, for example, that carte blanche inspection could be carried out reciprocally by American and Soviet nationals acting as partisan representatives of their countries. Moreover, since the amount of disarmament is correlated roughly with the extensiveness of inspection, it follows that adversary-type control systems are appropriate only for the verification of measures of a relatively limited scope. These limitations are reflected by the fact that the United States has made but one proposal based purely on reciprocal inspection--President Eisenhower's "open skies" plan of 1955.

In view of the difficulties confronting both the international and reciprocal models of inspection, a third alternative--a mixed-system design--has received considerable attention. Hans Linde has noted that:

¹
Finkelstein, p. 72.

²
Ibid., p. 67.

The premise of any mixed design is that there are some functions of the total system that should be organized internationally and others for which national¹ (adversary or host-national) operations are appropriate.

As was pointed out in the last section, American policy long ago tacitly accepted that idea while continuing to pay lip service to the international framework of inspection. In the first phase of the test ban negotiations, for example, the United States and the United Kingdom had no internally consistent inspection concept. On one hand, they demanded that the chiefs of control posts and the on-site inspection groups be composed of adversary personnel (that is, American and British staff in the Soviet Union and Russian staff in the United States and the United Kingdom). On the other hand, all staff members were considered to be international and impartial inasmuch as they were enjoined from seeking or receiving instructions "concerning the performance of their duties from any authority external to the [control] Organization."²

In early 1963, the United States, however, scrapped its earlier proposals and openly embraced the doctrine of a "mixed" verification system with reciprocal and international components. This move had the effect of bringing the design of the formal institutional arrangement into line with what had all along been the underlying philosophy of Ameri-

¹Linde, p. 75. See also pp. 76-84 for an excellent exposition of this concept. Incidentally, Linde's paper is part of an overall study of inspection and control prepared by the Institute for Defense Analyses for the United States Arms Control and Disarmament Agency in 1962. Significantly, later American policy statements on the verification of a test ban reflected concepts and judgments contained in this report.

²Article 9(2) of "Western Draft Treaty on the Discontinuance of Nuclear Weapon Tests, April 18, 1961," in Geneva Conference, p. 482.

can policy. Briefly stated, three "mixed" elements were now contemplated: (1) a network of nationally operated control stations located outside the state being monitored but nevertheless capable of detecting violations occurring within its territory; (2) an international commission whose function would be merely to coordinate the data gathering of the different national detection networks and to forward to one party the request by another for an on-site inspection of a suspicious seismic event; and (3) inspection teams whose composition, equipment, and operation would be under the management of the adversary¹ side.

Specifically, it was proposed that inspection units consist of fourteen adversary nationals (one of whom would act as the team leader) and six impartial international staff members.² As before, the number of inspections would be set by quotas and no at-the-site investigation could be initiated unless the seismic evidence met the technical criteria specified by the treaty.

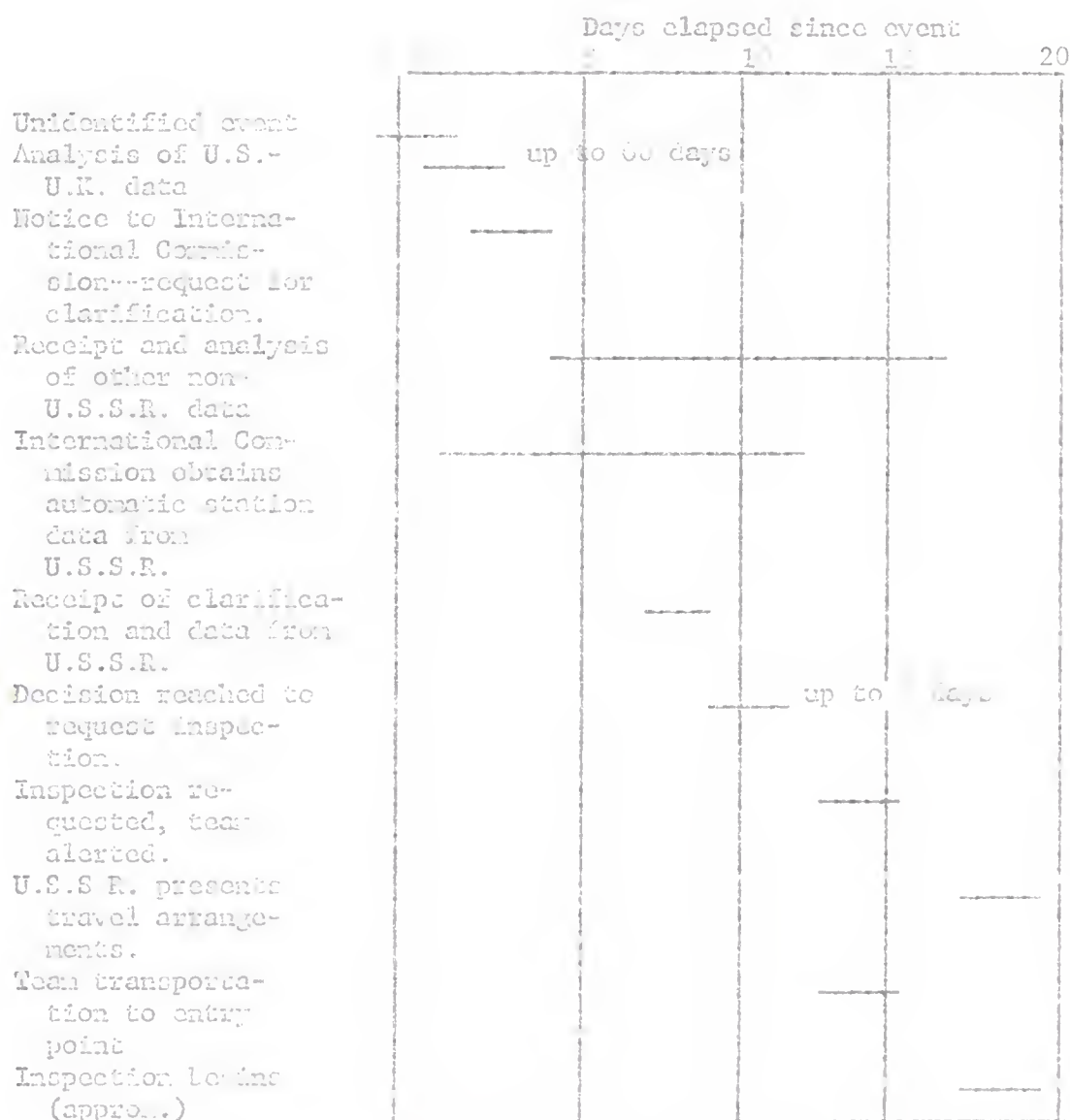
The following chart shows how American officials envisioned the operation of the "mixed" system just described in an on-site inspection in the Soviet Union. It should be noted that while international, reciprocal, and national components are utilized, the first type is subordinated to the last two. Although the control machinery is much less bulky than that recommended by the 1958 Geneva Conference of Experts, it nevertheless appears to be more rigorous and exacting in its performance.

¹ Why a Nuclear Test Ban Treaty? pp. 29-34.

² Ibid., p. 15.

TABLE I

TYPICAL TIME SCHEDULE FOR INITIATING ON-SITE INSPECTIONS



Source: U. S. Arms Control and Disarmament Agency, The Nuclear Test Ban Treaty, Arms Control and Disarmament Agency, Publication No. 15 (Washington: U. S. Government Printing Office, 1966), p. 21.

Up to this point, we have been concerned primarily with the details of inspection. We have considered the major problems on which the negotiating states have to come to terms before inspection can be operable. This brings us to the subject of the political milieu in which inspection would have to operate.

CHAPTER VII

INSPECTION AND CONTROL DIFFICULTIES: COLD WAR CONFLICT ASPECTS

In the last chapter we investigated the complex institutional problems which would arise in the verification of various forms of disarmament. The present chapter places these problems within the concrete political setting of postwar Soviet-American relations.

The Political Problem of Inspection

The dilemma of inspection can be stated quite simply: "Control is demanded as a substitute for mutual trust; yet a high degree of mutual confidence is necessary before a control plan can be put into effect."¹ No institutional arrangement, of course, can be created in a political vacuum. Some form of consensus, either "positive" or "negative," is required to sustain it.

According to one view, "positive consensus" (agreement between the wider national goals of nations) is indispensable for international cooperation, and there can be no substitute for it. Reasoning from this premise, Inis L. Claude, Jr. concludes that:

The fundamental requirement of a universal sense of security has now become the development of a mutuality of confidence and a sense of political harmony so deep and pervasive that peoples of the world will find it irrelevant that no system of inspection can possibly unearth all that might be hidden. . . . A happy marriage begins when husband and wife learn not to care in the least that it is impossible for them to devise a foolproof system for

¹ Noguee, The Diplomacy of Disarmament, p. 267.

checking up on each other; The political units of international society have not achieved this state of bliss, but it would appear that their best hope lies in the ultimate development of relationships which will make the state of uncertainty concerning the balance of power a tolerable condition.¹

This interpretation, which, in effect, rules out political accords between hostile states until an environment of confidence has evolved, is deficient in two important respects. First, it leaves unanswered the question of how a climate of distrust, such as exists at present, can be turned into one of trust. Second, it overlooks the possibility that, even in the absence of a political rapprochement, states may share important areas of common interests. Between the United States and the Soviet Union there is a substantial "negative consensus" regarding certain things both powers would like to avoid, notably a general thermonuclear war and the spread of nuclear weapons among non-nuclear countries. Conceivably, if the situation ever became sufficiently urgent, a Soviet-American agreement expressing these interests might be concluded in advance of the resolution of conflict between their basic national goals.

That nations can work together much easier in an atmosphere of trust is a matter of fact. The presence of tension, however, does not necessarily mean that states cannot cooperate with each other provided they perceive it to be in their national interest to do so. It is here that inspection has utility. If there is effective inspection, reliance can be placed on knowledge about the behavior of other signatories of an

¹ Claude, p. 321.

agreement rather than on trust.

Two other points regarding the relationship between inspection and political trust need to be stressed.

First, in order to have workable negotiated agreements in a conflict environment, a certain amount of mutual confidence is necessary. Not only must each party judge the agreement to be in its own interests; it must also believe that the other party perceives the agreement as being beneficial to its objectives.¹ Inspection can confirm and reinforce that confidence but cannot create it as such.

The Korean Armistice Agreement, signed on July 27, 1953, illustrates this point. As a part of the armistice provisions, it was agreed that there would be no further reinforcement of military personnel or equipment although the rotation of troops and the gradual replacement of existing equipment were permitted. To verify compliance with these limitations, a Neutral Nations Supervisory Commission composed of Swedish, Swiss, Polish, and Czech officers was established. Because of the determination of the Communists to build up the military strength of North Korea, however, they had no intention of honoring the arms control provisions of the armistice. Consequently, they refused to allow the NNSC to function properly.²

¹Verification and Response in Disarmament Agreements, Annex Vol. II, 38.

²The operation of inspection and control under the Korean Armistice Agreement is reviewed in U. S., Senate, Subcommittee of Committee on Foreign Relations, Control and Reduction of Armaments: Disarmament and Security in Eastern and Southern Asia, Staff Study No. 9, 85th Cong., 1st Sess., 1957.

Arthur H. Dean's description of the obstructive tactics of the Communists is enlightening:

. . . When the members of the Neutral Nations Supervisory Commission asked for permission to go into North Korea, almost invariably they met with delaying tactics or with evasion. When they finally did get there, they found that they had no quarters; they found there was no heat; they found that when they went to work, the lights suddenly and inexplicably failed. They found there was no gasoline for their jeeps or, when they did finally get to an airfield and tried actually to investigate a complaint of the Military Armistice Commission, they were driven up and down the airfields at 70 or 80 miles an hour, and the drivers refused to stop.

There were four cities specified in the armistice agreement where they were supposed to make the inspection. When they got there, they discovered that those cities had disappeared; that the peoples had been completely moved out of the villages. They could see across the river other villages which had been created, but at the point of a bayonet the Chairman of the Commission was prevented from going into these new cities. . . .¹

The inference to be drawn from the unsuccessful experience with inspection in Korea is not that Communist governments inevitably will frustrate and circumvent any inspection system they agree to in the future. Rather, it indicates that inspection is viable only where both sides continue to have a vested interest in upholding the agreement.

A second point to be kept in mind is that inspection is applicable only to short-run situations because of two reasons. First, political and technological changes are bound to render the detailed provisions of any inspection system obsolescent within a few years. Second, the level of distrust at the time of the negotiation agreement will not remain the same. If inspection confirms the avowed peaceful intentions of

¹ Control and Reduction of Armaments, Part 5, p. 964.

the signatories, it may become less relevant; if no confidence-building effect takes place, inspection likely will collapse and be discontinued. In short, the relationship between inspection and political conditions should be viewed within a dynamic rather than a static context.

Beyond the foregoing observations it is difficult to treat inspection and control as a general political problem. It has to be examined in relation to the concrete national interests of the United States and the Soviet Union. This will be the subject of the next section of the chapter.

The American View of Inspection

If one dominant theme of American policy on inspection and control had to be singled out, it would be the tendency of United States officials to be preoccupied more with technical than with political factors. Two important implications of this approach should be mentioned.

First, by stressing the technical criteria of inspection and control, the issue is removed from the realm of political bargaining and compromise. The Baruch Plan, for example, took into account the technical realities of atomic energy. On the other hand, little consideration was given to the probable Soviet reaction. While there is no definite evidence that United States policy-makers desired to deliberately force Soviet rejection of the international control of atomic energy, certainly they were fully aware that the Baruch proposal was incompatible with Soviet interests. J. Robert Oppenheimer, one of the architects of the American plan, in 1954 recalled his impression eight years earlier that

. . . any attempt at that time to establish control along these lines would, if accepted by the Soviets, have so altered their whole system and so altered their whole relations with the Western world that the threat which has been building up year after year since could not have existed. I think no one at that time could with much confidence believe that they would accept these proposals.¹

The effect of this approach has been, in the words of George F. Kennan, to "push the Kremlin against a closed door."² Undoubtedly, the situation in which the United States found itself immediately after the Second World War necessitated a high "asking price" for atomic disarmament. The rapid, ill-advised demobilization of conventional armed forces left the United States in a precarious military position, depending largely on atomic weapons to counter the Soviet threat in Europe. Under these circumstances an atomic control treaty may have seriously undermined American security. Consequently, Department of Defense officials strongly opposed the disarmament movement in general and resisted efforts to soften the inspection and control provisions of the Baruch Plan to make it more palatable to the Soviets.³

The technical orientation of American policy is also reflected in the assumption that inspection and control must be a riskless, fool-

¹U. S., Atomic Energy Commission, In the Matter of J. Robert Oppenheimer: Transcript before Personnel Security Board, Washington, D. C., April 12, 1954, through May 6, 1954 (Washington: U. S. Government Printing Office, 1954), p. 38.

²Quoted in Fred W. Neal, U. S. Foreign Policy and the Soviet Union (Santa Barbara, Calif.: Center for the Study of Democratic Institutions, 1961), p. 23.

³On the opposition of American military leaders to the disarmament negotiations, see James Forrestal, The Forrestal Diaries, ed. Walter Millis (New York: The Viking Press, 1951), pp. 240-241, 290-291.

proof venture. Here again, the position of the United States is understandable in light of its experience with uninspected agreements after World War I and its suspicion of the extreme secrecy of the Soviet Union. The technical ideal of "airtight" inspection, however, has proven to be unattainable, if not inherently impossible. Thus so long as American officials thought in terms of "foolproof" systems for the verification of disarmament, progress toward reaching an agreement was blocked.¹ Yet there is no reason to believe that the issue of inspection and control was being used purposely to stymie the negotiations.

The theme of American policy discussed above emerged early in the postwar negotiations and has continued to influence official thinking strongly. Even so, in recent years the American view of inspection and control has changed noticeably. In the first place, "absolute security" is no longer the stated goal which the United States expects to realize from an inspected disarmament agreement. President Kennedy in June, 1963, called attention to the fact that:

No treaty, however much it may be to the advantage of all, however tightly it may be worded, can provide absolute security against the risks of detection and evasion. But it can, if it is sufficiently effective in its enforcement and if it is sufficiently in the interests of its signers, offer far more security and far fewer risks than an unabated, uncontrolled, unpredictable arms race.²

¹To illustrate, President Truman, in outlining the prerequisites for a disarmament agreement, expressed the conviction that it "must be foolproof. Paper promises are not enough. Disarmament must be based on safeguards which will insure the compliance of all nations. . . . It must be founded upon free and open interchange of information across national borders." ("Address by President Truman to the General Assembly [Extract], October 24, 1950," in Documents on Disarmament, 1945-1959, I, 258.)

²New York Times, June 11, 1963.

The recognition that inspection, no matter how thorough or penetrating it is, cannot provide absolute assurance has placed American policy on a more realistic footing. Therefore, if the United States, in fact, desires inspected arms controls, the real question that has to be resolved is what constitutes an acceptable degree of risk and not how to eliminate all risk of undetected violations.

With the growing realization that practicable systems of inspection are capable of less-than-perfect performance, the United States has also turned its attention to the political elements involved. The pervasive controls proposed by the Baruch Plan, as we saw earlier, posed a grave threat to the political regime of the Soviet Union. In recent years, however, the United States has attempted to convince the Russians that inspection for limited, first-step measures would not jeopardize their political or ideological system. Along that line, Secretary of State Rusk has noted that:

If a test ban treaty can operate effectively and in ways which demonstrate that the inspection connected with it does not jeopardize Soviet security or result in any particular embarrassments to the Soviet Union and its people, then the Soviet leadership may be more inclined to enter into other similar agreements.¹

Thus the United States apparently assumes that not all forms of inspection are inconsistent with the "closed society" of the Soviet Union.

Despite the increased flexibility and moderation of American inspection and control policy, no appreciable progress has been made in the

¹U. S., Senate, Committee on Foreign Relations, Hearing, Test Ban Negotiations, 88th Cong., 1st Sess., 1963, p. 4.

search for some common ground with the Soviet Union. As a result, serious doubts have been raised as to whether American and Russian views of inspection can ever be reconciled since differences in basic principles¹ and objectives, rather than disagreements over details, are involved. This contention will be examined in the analysis of the Soviet view of inspection which follows.

The Russian View of Inspection

Perhaps the clearest statement of the Russian philosophy of inspection that we have was made by Semen Tsarapkin in 1960 in the Geneva test ban talks when he announced Soviet acceptance of three on-site inspections each year. It is therefore quoted at length here:

In determining the approach to the solution of the question of inspection it would be wrong to proceed as the United States side does. The United States believes that the approach to this question must be based on the assumption that the parties to the treaty will be trying to evade the treaty; . . . that the parties to the treaty will be striving for secret underground nuclear weapon tests and will thus be deliberately working to violate the treaty which they have signed voluntarily.

We believe that such a negative approach to the voluntary treaty can lead to no good; and if these are really your views, then all these precautions are useless, since if every party to the treaty assumes that the other side will be trying to violate the treaty, such a treaty will obviously be short-lived and no control measures, however severe and rigorous, will save the situation. . . . We in the USSR believe that if such great world powers as the Soviet Union, the United States and the United Kingdom sign a treaty they will have to observe that treaty honestly. This is how we approach the question and if we agree to the establishment of inspection quotas it is only in order to furnish the parties to this

¹Charles B. Marshall, "Hide and Seek: Some Dour Thoughts on Inspection," New Republic, CXLVII (November 24, 1962), 14-17.

treaty with certain additional safeguards to the control system which we are supporting. . . . And in practice, in our view, inspection will not be used in order to apprehend violators, since we believe that there will not be any, but in order to announce, after carrying out such an inspection, that suspicions that a nuclear explosion has been carried out were completely unfounded and that the treaty was being observed.¹

Thus the Soviet position cannot be accurately characterized as one of blanket opposition to inspection. On the occasions when the disarmament negotiations have gotten down to "serious business" the Russians have generally conceded the necessity for some form of verification. At the same time, it is also clear that they are extremely fearful of the negative effects of inspection on their interests. It is significant that the 1960 Soviet offer to permit three on-site inspections a year to monitor a nuclear test-ban was retracted in 1961, reinstated in 1962, and then withdrawn again in 1963. This may be taken as an indication of Soviet fickleness. On the other hand, it does suggest that a state of great uncertainty exists in the Kremlin as to how far the Soviet Union can go in meeting the minimum demands of the West on inspection without jeopardizing its own interests.

The reluctance of the Soviet Union to open its territory to inspection should neither be overlooked nor overemphasized in assessing the willingness of the Russians to seriously consider arms control. Let us first examine the sources of the Soviet attitude toward inspection:

¹"Statement by the Soviet Representative (Tsarapkin) at the Geneva Conference on the Discontinuance of Nuclear Weapon Tests, July 26, 1960," in Documents on Disarmament, 1960, pp. 174-175.

1. Soviet culture and tradition. Secrecy is a deep-rooted cultural trait of the Russians, going back far beyond the existing Communist regime. Charles B. Marshall cites, as examples of this aspect of Soviet national character, the refusal of the Russians to permit the Western allies to schedule chain bombing out of Russian airfields and the restrictions on the operations of the United Nations Relief and Recovery Administration.¹ Indeed, for some years after the war the Soviets forbade the publication of street maps of cities, guidebooks, and even telephone directories.² Under such conditions, quite clearly the Russians are not apt to look favorably on the intrusion of foreign inspectors.

2. Soviet military security. There is yet another dimension to Soviet secrecy--its military ramifications. The Russians have turned secrecy into an important military asset. Due to the greater openness of the United States, the Kremlin is able to plot fairly accurately the location of American retaliatory forces. Consequently, a good percentage of American military expenditures is used for "hardening" weapons systems by placing them underground and underwater and by moving them around continually. The Russians, however, rely to a great extent on secrecy to protect their strike forces.³

It is reasonable to suppose that the Soviet Union will be reluctant to give up that advantage. Since by the very nature of things the

¹Marshall, New Republic, CXLVII (November 24, 1962), 16.

²Frederick L. Schuman, "The Impasse of Disarmament," Current History, XLI (November, 1961), 271.

³An interesting article on the importance of secrecy to Soviet defense is found in New York Times, May 17, 1963.

United States would profit more from the information yielded by inspection, the Russians would probably require some concession to offset this advantage as the price for any agreement involving inspection. The American argument that secrecy constitutes a military danger rather than a military asset has not changed Soviet thinking on this point.

3. The Soviet political system. "Sovietologists" are in general agreement that the idea of inspection is irreconcilable with the existing Soviet regime.¹ To allow effective inspection with complete freedom of movement and access would, in the judgment of John S. Reshetar, "undermine the internal system of political controls essential to the preservation of the present regime."² In addition, the Soviets no doubt are anxious not to expose examples of political repression or economic backwardness.

In recording Soviet objections to the control system proposed by the Baruch Plan, Andrei Gromyko revealed Russian fears of the dominance of inspection by a hostile non-Soviet majority:

It is easy to understand that the granting of such rights to control organs would mean a complete arbitrariness of these organs. . . . The granting of such rights to control organs would give an easy opportunity for interference in the activities of the enterprises on the territory of one or another country, without any grounds for such interference. . . . The Soviet Union is aware that there will be a majority in the control organ which may take one-sided decisions, a majority on whose benevolent attitude toward the Soviet Union the Soviet people cannot count. Therefore, the

¹ U. S., Senate, Subcommittee of Committee on Disarmament, Control and Reduction of Armaments: Attitudes of Soviet Leaders toward Disarmament, Staff Study No. 8, 85th Cong., 1st Sess., 1957.

²Ibid., p. 93.

Soviet Union, and probably not only the Soviet Union, cannot allow that the fate of its national economy be handed over to this organ.¹

Put together, these three factors form a strong justification-- in the Soviet mind--for a suspicious attitude toward the American insistence that the disarmament negotiations come to grips with the inspection question before anything else. It has become customary for the Soviets to attribute this concern to the American desire to ferret out Russian military secrets. On that ground, the Soviets since 1953 have held to the formula that inspection of disarmament is legitimate, but inspection of armaments is not. By this line of reasoning, they contend that complete inspection can come about only when there is general and complete disarmament, and no sooner.

The Way Ahead

Now let us return to the question that was posed at the outset-- whether Soviet-American agreement on inspection, given the present state of affairs, is plausible during the foreseeable future. The data which we have examined suggest two definite conclusions:

First, the mechanical and operational, as well as the political, difficulties related to horizontal inspection are so intractable it cannot be implemented within the existing setting of international relations. Therefore, any arms control program which necessitates unchecked, unlimited inspection has to be regarded as a goal of the distant, rather than the immediate, future.

¹"Statement by the Soviet Representative (Gromyko) to the Security Council, March 5, 1947," in Documents on Disarmament, 1945-1959, I, 70-74.

Second, the verification systems based on the principle of vertical inspection offer the greatest promise for use in the military relations of nations. While inspection of this type is much more circumscribed than the horizontal form, it is potentially useful for the verification of first-step measures which could "break the ice" of the Cold War.

Third, there is no conclusive evidence that all forms of inspection are incompatible with the interests and values of the Soviet Union. What the Russians have consistently opposed has been modes of inspection which grant a license to search anything and everywhere. On the other hand, the Soviets have evidenced a strong interest in some kinds of inspection with narrowly and rigidly defined access rights. In particular, they sponsored, first in 1955, a plan for stationing observers at strategic transportation junctions for the purpose of keeping an eye on the movement of troops and military equipment. Of the spate of proposals that have been forthcoming in the postwar disarmament negotiations, perhaps this one comes the closest to mutually benefiting the national interests of the Soviet Union and the United States. Significantly, in the wake of the Sino-Soviet split, Premier Khrushchev revived the "crossroads" plan and seemed to invite serious negotiations on it.¹

If, as Secretary of State Rusk maintains, "secrecy and disarmament are fundamentally incompatible," then the future of the disarmament

¹
New York Times, July 20, 1963.

negotiations holds no roseate hopes.¹ If, however, there is some alternative between complete secrecy and complete openness, it is conceivable that the mutual interests of the United States and the Soviet Union in curbing the nuclear arms race will lead eventually to inspected arms controls.

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U. S., Arms Control and Disarmament Agency, Statement by Secretary of State Rusk to Geneva Disarmament Conference, March 27, 1962, Disarmament Document Series No. 69, n.d., p. 3.

A SELECTED BIBLIOGRAPHY

I. Bibliographies

U. S. Department of the Army, Army Library. Disarmament: A Bibliographic Record, 1916-1960. Washington, 1960.

U. S. Department of State. Arms Control and Disarmament: Studies in Progress or Recently Completed. Department of State Publication No. ACD-1. Washington: U. S. Government Printing Office, 1963.

_____. A Basic Bibliography: Disarmament, Arms Control and National Security. Department of State Publication No. 7193. Washington: U. S. Government Printing Office, 1961.

_____. Publications on Atomic Energy and Conventional Armaments. Department of State Publication No. 3762. Washington: U. S. Government Printing Office, 1950.

Wright, Christopher. "Selected Critical Bibliography on Disarmament," Daedalus, LXXXIX (Fall, 1960), 1055-1070.

II. Official Documents

A. United Nations

U. N Atomic Energy Commission. Official Records. 1st-24th Meetings. Lake Success, 1946-1949.

_____. Official Records: Supplement No. 1. Lake Success, 1946.

_____. Official Records: Supplement No. 2. Lake Success, 1946.

_____. Official Records: Supplement No. 3. Lake Success, 1946.

_____. Official Records: Fourth Year, Special Supplement No. 1. Lake Success, 1949.

_____. Official Records: Special Supplement. Report to the Security Council. Lake Success, 1946.

_____. Official Records, Second Year: Special Supplement, Second Report to the Security Council, September 11, 1947. Lake Success, 1947.

_____. Official Records, Third Year: Special Supplement, Third Report to the Security Council, May 17, 1948. Lake Success, 1948.

U. N. Department of Public Information. Yearbook of the United Nations, 1946-1961. Late Success, 1947-1963.

U. N. Disarmament Commission. Official Records, 1st-75th Meetings, 1952-1960.

_____. Official Records: Supplement for January, February and March 1952. New York, 1952.

_____. Official Records: Supplement for April, May and June 1952. New York, 1952.

_____. Official Records: Supplement for July, August and September 1952. New York: 1952.

_____. Official Records: Supplement for October, November and December 1952. New York, 1952.

_____. Official Records: Supplement for January, February and March 1953. New York, 1953.

_____. Official Records: Supplement for April, May and June 1953. New York, 1953.

_____. Official Records: Supplement for July, August and September 1953. New York, 1954.

_____. Official Records: Supplement for October, November and December 1953. New York, 1954.

_____. Official Records: Special Supplement No. 1, Second Report of the Disarmament Commission. U. N. Document DC/20, October 9, 1953. New York, 1953.

_____. Official Records: Supplement for January, February and March 1954. New York, 1954.

_____. Official Records: Supplement for April, May and June 1954. New York, 1954.

_____. Official Records: Supplement for July, August and September 1954. New York, 1954.

_____. Official Records: Supplement for October, November and December, 1954. New York, 1955.

_____. Official Records: Supplement for April to December 1955. New York, 1956.

_____. Official Records: Supplement for January to December 1956.
New York, 1957.

_____. Official Records: Supplement for January to December 1958.
New York, 1959.

_____. Official Records: Supplement for January to December 1959.
New York, 1960.

_____. Official Records: Supplement for January to December 1960.
New York, 1962.

U. N. General Assembly. Report of the Conference of Experts for the Study of Possible Measures Which Might Be Helpful in Preventing Surprise Attack and for the Preparation of a Report Thereon to Governments. U. N. Document A/4078, January 5, 1959.

U. N. Security Council. Official Records, 1st-16th Year, 1946-1961.

B. Great Britain

Great Britain. House of Commons. Report of the Proceedings of the Sub-Committee of the United Nations Disarmament Commission Held at Lancaster House, London, March 10-May 4, 1956. Cmd. 9770. London: Her Majesty's Stationery Office, 1956.

_____. Report of the Proceedings of the Sub-Committee of the United Nations Disarmament Commission, 1955. Cmd. 9636. London: Her Majesty's Stationery Office, 1955.

_____. Report on the Proceedings of the Sub-Committee of the United Nations Disarmament Commission Held at Lancaster House, London, May 13-June 22, 1954. Cmd. 9204. London: Her Majesty's Stationery Office, 1954.

_____. Report on the Proceedings of the Subcommittee of the United Nations Disarmament Commission Held at Lancaster House, London, March 18-September 6, 1957. Cmd. 333. London: Her Majesty's Stationery Office, 1957.

_____. Report of the [United Nations] Disarmament Talks. Cmd. 228. London: Her Majesty's Stationery Office, 1957.

_____. Verbatim Records of the Meetings of the Second Session of the Sub-Committee of the United Nations Disarmament Commission Held at Lancaster House, London, February 25-May 18, 1955. Cmd. 9648-9650. London: Her Majesty's Stationery Office, 1956.

. Verbatim Records of the Meetings of the Second Session of the Sub-Committee of the United Nations Disarmament Commission Held at New York, June 1-October 7, 1955. Cmd. 9651-9652. London: Her Majesty's Stationery Office, 1956.

. Verbatim Records of the Meetings of the Sub-Committee of the United Nations Disarmament Committee Held at Lancaster House, London, May 13-June 22, 1954. Cmd. 9205. London: Her Majesty's Stationery Office, 1954.

. Verbatim Records of the Meetings of the Ten-Power Disarmament Committee Held at the Palais des Nations, Geneva, March 15-April 29, 1960 and June 7-June 27, 1960 (1st-48th Meetings). Cmd. 1152. London: Her Majesty's Stationery Office, 1960.

C. United States

U. S. Arms Control and Disarmament Agency. Address by Secretary of State Dean Rusk before the New Hampshire Council on World Affairs, Concord, New Hampshire, Saturday, June 16, 1962. Disarmament Document Series No. 79, n.d.

. Arms Control and Disarmament. Arms Control and Disarmament Agency Publication No. 11. Washington: U. S. Government Printing Office, 1963.

. Disarmament Document Series. (Issued irregularly, 1961-).

. Disarmament: The New U. S. Initiative. Arms Control and Disarmament Agency Publication No. 8. Washington: U. S. Government Printing Office, 1962.

. Documents on Disarmament, 1961. Arms Control and Disarmament Agency Publication No. 5. Washington: U. S. Government Printing Office, 1962.

. International Negotiations on Ending Nuclear Weapon Tests, September 1961-September 1962. Arms Control and Disarmament Agency Publication No. 9. Washington: U. S. Government Printing Office, 1962.

. Progressive Inspection for Disarmament: The Concept of Progressive Zonal Inspection. Arms Control and Disarmament Agency Publication No. 13. Washington: U. S. Government Printing Office, 1963.

. Risk and Security in the Age of Nuclear Weapons. Address by William C. Foster. Arms Control and Disarmament Agency Publication No. 12. Washington: U. S. Government Printing Office, 1963.

- _____. Second Annual Report to Congress, January 1, 1962-December 31, 1962. Arms Control and Disarmament Agency Publication No. 14. Washington: U. S. Government Printing Office, 1963.
- _____. Why a Nuclear Test Ban Treaty? Arms Control and Disarmament Agency Publication No. 15. Washington: U. S. Government Printing Office, 1963.
- U. S. Atomic Energy Commission. The Effects of Nuclear Weapons. Washington: U. S. Government Printing Office, 1957.
- _____. In the Matter of J. Robert Oppenheimer: Transcript of Hearing before Personnel Security Board, Washington, D. C., April 12, 1954 through May 6, 1954. Washington: U. S. Government Printing Office, 1954.
- U. S. Congress, Joint Committee on Atomic Energy. Hearings, Biological and Environmental Effects of Nuclear War. 86th Cong., 1st Sess., 1959.
- _____. Hearings, Technical Aspects of Detection and Inspection Controls of a Nuclear Weapons Test Ban. 2 parts. 86th Cong., 2d Sess., 1960.
- _____. Technical Aspects of Detection and Inspection Controls of a Nuclear Weapons Test Ban: Summary-Analysis of Hearings, April 19, 20, 21, and 22, 1960. 86th Cong., 2d Sess., 1960.
- U. S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States, 1946-1961. Washington: Government Printing Office, 1947-1962.
- U. S. Department of State. Atomic Impasse, 1948: A Collection of Speeches [by Frederick Osborn]. Department of State Publication No. 3272. Washington: U. S. Government Printing Office, 1948.
- _____. Disarmament at a Glance. Department of State Publication No. 7058. Washington: U. S. Government Printing Office, 1961.
- _____. Disarmament: The Intensified Effort, 1955-1958. 2d ed. rev. Department of State Publication No. 7070. Washington: U. S. Government Printing Office, 1960.
- _____. Documents on Disarmament, 1945-1959. 2 vols. Department of State Publication No. 7003. Washington: U. S. Government Printing Office, 1960.
- _____. Documents on Disarmament, 1960. Department of State Publication No. 7172. Washington: U. S. Government Printing Office, 1961.

_____. Freedom from War: The United States Program for General and Complete Disarmament in a Peaceful World. Department of State Publication No. 7277. Washington: U. S. Government Printing Office, 1961.

_____. The Geneva Conference of Heads of Governments, July 18-23, 1955. Department of State Publication No. 6046. Washington: U. S. Government Printing Office, 1955.

_____. Geneva Conference on the Discontinuance of Nuclear Weapon Tests: History and Analysis of Negotiations. Department of State Publication No. 7258. Washington: U. S. Government Printing Office, 1961.

_____. The Geneva Meeting of Foreign Ministers, October 27-November 16, 1955. Department of State Publication No. 6156. Washington: U. S. Government Printing Office, 1955.

_____. International Control of Atomic Energy: Growth of a Policy. Department of State Publication No. 2702. Washington: U. S. Government Printing Office, 1946.

_____. International Control of Atomic Energy: Policy at the Crossroads. Department of State Publication No. 3161. Washington: U. S. Government Printing Office, 1948.

_____. The Nuclear Test-Ban Treaty: Gateway to Peace. Department of State Publication No. 7254. Washington: U. S. Government Printing Office, 1961.

_____. The Record on Disarmament: Report of U. S. Deputy Representative to Disarmament Commission on London Meeting of Subcommittee of Five and on Disarmament Commission Meetings, July, 1954. Department of State Publication No. 5581. Washington: U. S. Government Printing Office, 1954.

_____. A Report on the International Control of Atomic Energy. Department of State Publication No. 2498. Washington: U. S. Government Printing Office, 1946.

_____. United States Efforts toward Disarmament: Report to the President by the Deputy U. S. Representative on the United Nations Disarmament Commission. Department of State Publication No. 4902. Washington: U. S. Government Printing Office, 1953.

_____. United States Participation in the United Nations: Report by the President to the Congress for the Year Issued annually since 1947, with slightly varying titles. Washington: U. S. Government Printing Office.

- U. S. House of Representatives, Committee on Foreign Relations. Hearings, To Establish a United States Arms Control Agency. 87th Cong., 1st Sess., 1961.
- U. S. Senate, Subcommittee of Committee on Armed Services. Hearings, Arms Control and Disarmament. 87th Cong., 2d Sess., 1962.
- U. S. Senate, Committee on Foreign Relations. Hearings, Disarmament Agency. 87th Cong., 1st Sess., 1961.
- _____. Hearings, Events Incident to the Summit Conference. 86th Cong., 2d Sess., 1960.
- _____. Hearings, Statute of International Atomic Energy Agency. 85th Cong., 1st Sess., 1957.
- _____. Hearing, Test Ban Negotiations and Disarmament. 81st Cong., 1st Sess., 1963.
- U. S. Senate, Subcommittee of Committee on Foreign Relations. Chemical-Biological-Radiological (CBR) Warfare and Its Disarmament Aspects. 86th Cong., 2d Sess., 1960.
- _____. Conference on the Discontinuance of Nuclear Weapons Tests: Analysis of Progress and Positions of the Participating Parties, October 1958-August 1960. 86th Cong., 2d Sess., 1960.
- _____. Control and Reduction of Armaments: Attitudes of Soviet Leaders toward Disarmament. Staff Study No. 8, June 6, 1957. 85th Cong., 1st Sess., 1957.
- _____. Control and Reduction of Armaments: Detection of and Inspection for Underground Nuclear Explosions, Replies from Seismologists to Subcommittee Questionnaire. Staff Study No. 10, June 23, 1958. 85th Cong., 2d Sess., 1958.
- _____. Control and Reduction of Armaments: Disarmament and Security in Eastern and Southern Asia. Staff Study No. 9, July, 1957. 85th Cong., 1st Sess., 1957.
- +_____. Control and Reduction of Armaments: Final Report of the Committee on Foreign Relations, Subcommittee on Disarmament, Pursuant to the Provisions of S. Res. 93, S. Res. 185, and S. Res. 286, 84th Congress, and S. res. 61, S. Res. 151, S. Res. 192, and S. Res. 241, 85th Congress. Senate Report No. 2501. 85th Cong., 2d Sess., 1958.
- _____. Disarmament and Security: A Collection of Documents, 1919-55. 84th Cong., 2d Sess., 1956.

- _____. Hearings, Control and Reduction of Armaments. 17 parts and index. 84th Cong., 2d Sess.; 85th Cong.; 1st Sess., 85th Cong., 2d Sess.; 1956-1958.
- _____. Hearings, Disarmament and Foreign Policy. 2 parts. 86th Cong., 1st Sess., 1959.
- _____. Hearing, Geneva Test Ban Negotiations. 86th Cong., 1st Sess., 1959.
- _____. Hearing on Disarmament Developments, Spring 1960. 86th Cong., 2d Sess., June 10, 1960.
- _____. Hearings, Renewed Geneva Disarmament Negotiations. 87th Cong., 2d Sess., 1963.
- _____. Hearing, Review of Operations of Arms Control and Disarmament Agency. 87th Cong., 2d Sess., 1962.
- _____. Hearing, Technical Problems and the Geneva Test Ban Negotiations. 86th Cong., 2d Sess., 1960.
- U. S. White House Disarmament Staff. Fact Sheet on Aerial Inspection. Disarmament Background Series, No. M-9. Washington: U. S. Government Printing Office, 1957.
- _____. Reference Documents on Disarmament Matters. Background Series [D-1--D-42], Washington: U. S. Government Printing Office, [1956].

D. Other Sources

Mutual Inspection for Peace. (No facts of publication indicated but apparently published by U. S. Government around 1955.)

III. Books, Pamphlets, and Studies

- Adams, Sherman. Firsthand Report: The Story of the Eisenhower Administration. New York: Harper and Brothers, 1961.
- Arms Control: Proceedings of the Fourth United States Air Force Academy Assembly, April 4-7, 1962. Air Force Academy, Colorado: United States Air Force Academy, 1962.
- Aron, Raymond. On War. Translated by Terence Kilmartin. Garden City, N. Y.: Doubleday and Company, 1959.

Barnet, Richard J. "The Soviet Attitude on Disarmament," Arms and Arms Control. Edited by Ernest Lefever. New York: Frederick A. Praeger, 1962, pp. 89-105.

_____. Who Wants Disarmament? Boston: Beacon Press, 1960.

Baruch, Bernard M. Baruch: My Story. New York: Henry Holt and Company, 1957.

_____. Baruch: The Public Years. New York: Holt, Rinehart and Winston, 1960.

Batchelder, Robert C. The Irreversible Decision, 1939-1950. Boston: Houghton Mifflin Company, 1961.

Bechhoefer, Bernhard G. "Negotiating with the Soviet Union," Arms Control, Disarmament, and National Security. Edited by Donald G. Brennan. New York: George Braziller, 1961, pp. 269-281.

_____. Postwar Negotiations for Arms Control. Washington: The Brookings Institution, 1961.

Bennett, John C. (ed.) Nuclear Weapons and the Conflict of Conscience. New York: Charles Scribner's Sons, 1962.

Blackett, P. M. S. Atomic Weapons and East-West Relations. London: Cambridge University Press, 1956.

_____. Fear, War, and the Bomb. New York: Whittlesey House, 1948.

Bloomfield, Lincoln P. The Politics of Arms Control: Troika, Veto, and International Institutions. Study Memorandum No. 3. Washington: Institute for Defense Analyses, 1961.

Bohn, Louis C. "Non-Physical Inspection Techniques," Arms Control, Disarmament, and National Security. Edited by Donald G. Brennan. New York: George Braziller, 1961, pp. 347-364.

Bowie, Robert R. "Arms Control and United States Foreign Policy," Arms Control: Issues for the Public. Edited by Louis Henkin. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1961, pp. 49-75.

_____. "Basic Requirements of Arms Control," Arms Control, Disarmament, and National Security. Edited by Donald G. Brennan. New York: George Braziller, 1961, pp. 43-55.

Brennan, Donald G. (ed.) Arms Control, Disarmament, and National Security. New York: George Braziller, 1961.

- _____. "The Roles of Inspection in Arms Control," Summer Study on Arms Control, 1960: Collected Papers. Boston: American Academy of Arts and Sciences [1961], pp. 247-252.
- _____. "Setting and Goals of Arms Control," Arms Control, Disarmament, and National Security. Edited by Donald G. Brennan. New York: George Braziller, 1961, pp. 19-42.
- _____. and Halperin, Morton H. "Policy Considerations of a Nuclear-Test Ban," Arms Control, Disarmament, and National Security. Edited by Donald G. Brennan. New York: George Braziller, 1961, pp. 234-266.
- Brodie, Bernard. Strategy in the Missile Age. Princeton: Princeton University Press, 1959.
- Brown, Harrison and Real, James. Community of Fear. Santa Barbara, Calif.: Center for the Study of Democratic Institutions, 1960.
- Buchan, Alastair. "Their Bomb and Ours: Some Concluding Remarks on the Paradox of Force," Nuclear Weapons, Missiles, and Future War. Edited by Charles A. McClelland. San Francisco: Chandler Publishing Company, 1960, pp. 130-139.
- Buell, Raymond L. The Washington Conference. New York: D. Appleton and Company, 1922.
- Bull, Hedley. The Control of the Arms Race. London: Institute for Strategic Studies, 1961.
- Byrnes, James F. Speaking Frankly. New York: Harper and Brothers, 1947.
- Clark, Grenville, and Sohn, Louis. World Peace through World Law. Cambridge: Harvard University Press, 1958.
- Claude, Inis L., Jr. Swords into Plowshares: The Problems and Progress of International Organization. 2d ed. rev. New York: Random House, 1959.
- Coit, Margaret L. Mr. Baruch. Boston: Houghton Mifflin Company, 1957.
- Collart, Yves. Disarmament: A Study Guide and Bibliography on the Efforts of the United Nations. The Hague: Martinus Nijhoff, 1958.
- Cousins, Norman. In Place of Folly. New York: Harper and Brothers, 1961.

- Donovan, Robert J. Eisenhower: The Inside Story. New York: Harper and Brothers, 1956.
- Feld, Bernard T. "Inspection Techniques of Arms Control," Arms Control, Disarmament, and National Security. Edited by Donald G. Brennan. New York: George Braziller, 1961, pp. 317-332.
- _____, et. al. The Technical Problems of Arms Control. New York: Institute for International Order, 1960.
- Forbes, Henry W. The Strategy of Disarmament. Washington: Public Affairs Press, 1962.
- Forrestal, James. The Forrestal Diaries. Edited by Walter Millis. New York: The Viking Press, 1951.
- Fowler, John M. (ed.) Fallout: A Study of Superbombs, Strontium 90, and Survival. New York: Basic Books, 1960.
- Fox, William T. R. "The International Control of Atomic Weapons," The Absolute Weapon. Edited by Bernard Brodie. New York: Harcourt, Brace, 1946, pp. 169-203.
- Frisch, David H. (ed.) Arms Reduction: Program and Issues. New York: Twentieth Century Fund, 1961.
- Fromm, Erich. May Man Prevail? Garden City, N. Y.: Doubleday and Company, 1961.
- Frye, William R. Disarmament: Atoms into Plowshares? Headline Series No. 113. New York: Foreign Policy Association, 1955.
- Gumbel, E. J. "Disarmament and Clandestine Rearmament under the Weimar Republic," Inspection for Disarmament. Edited by Seymour Melman. New York: Columbia University Press, 1958, pp. 203-219.
- Hadley, Arthur T. The Nation's Safety and Arms Control. New York: Viking Press, 1961.
- Hartmann, Frederick H. The Relations of Nations. 2d ed. rev. New York: The Macmillan Company, 1962.
- Henkin, Louis. Arms Control and Inspection in American Law. New York: Columbia University Press, 1958.
- _____. (ed.). Arms Control: Issues for the Public. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1961.
- Herz, John H. International Politics in the Atomic Age. New York: Columbia University Press, 1959.

- Hunter, Holland. The Control of Unknown Arms. Ann Arbor: University of Michigan Press, 1963.
- Huntington, Samuel P. "Arms Race: Prerequisites and Results," Public Policy. Vol. VIII. Edited by Carl J. Friedrich and Seymour Harris. Cambridge: Harvard University Press, 1958, pp. 41-86.
- Iklé, Fred C., et al. Alternative Approaches to the International Organization of Disarmament. Report No. R-391-ARPA. Santa Monica, Calif.: Rand Corporation, 1962.
- Kahn, Herman. On Thermonuclear War. Princeton: Princeton University Press, 1961.
- Katz, Amrom. "Hiders and Finders: An Approach to Inspection and Evasion," Arms and Arms Control. Edited by Ernest Lefever. New York: Frederick A. Praeger, 1962, pp. 199-207.
- King, James E., Jr. "Arms Control and United States Security," Arms Control: Issues for the Public. Edited by Louis Henkin. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1961, pp. 76-111.
- Kissinger, Henry A. The Necessity for Choice: Prospects of American Foreign Policy. New York: Harper and Brothers, 1960.
- _____. Nuclear Weapons and Foreign Policy. New York: Harper and Brothers, 1957.
- Kramish, Arnold. Atomic Energy in the Soviet Union. Stanford: Stanford University Press, 1959.
- Lefever, Ernest W. (ed.) Arms and Arms Control. New York: Frederick A. Praeger, 1962.
- Levison, Walter J. "Capabilities and Limitations of Aerial Inspection," Inspection for Disarmament. Edited by Seymour Melman. New York: Columbia University Press, 1958, pp. 59-74.
- Liddell-Hart, Basil H. Deterrent or Defense: A Fresh Look at the West's Military Position. New York: Frederick A. Praeger, 1960.
- Linde, Hans. "Organization of a Mixed National and International Inspectorate," Verification and Response in Disarmament Agreements. Washington: Institute for Defense Analyses, 1962, Annex Vol. II, pp. 72-84.
- Madariaga, Salvador de. The Blowing Up of the Parthenon. New York: Frederick A. Praeger, 1960.
- _____. Disarmament. New York: Coward-McCann, 1929.

- Marshall, Charles B. "A Primer on Inspection [Excerpt]," Verification and Response in Disarmament Agreements. Washington: Institute for Defense Analyses, 1962, Annex Vol. II, pp. 97-102.
- Marzani, Carl and Perlo, Victor. Dollars and Sense of Disarmament. New York: Marzani and Munsell, 1960.
- Melman, Seymour (ed.). Inspection for Disarmament. New York: Columbia University Press, 1958.
- _____. The Peace Race. New York: George Braziller, 1962.
- Milburn, Thomas W., et al. Summer Study on Arms Control, 1960: Non-Physical Inspection Techniques. Boston: American Academy of Arts and Sciences, [1961].
- Moch, Jules S. Human Folly: To Disarm or Perish? London: Victor Gollancz, 1955.
- Morgan, John H. Assize of Arms: The Disarmament of Germany and Her Rearmament, 1919-1939. New York: Oxford University Press, 1946.
- Morgenthau, Hans J. In Defense of the National Interest. New York: Alfred A. Knopf, 1952.
- _____. Politics among Nations: The Struggle for Power and Peace. 3d ed. rev. New York: Alfred A. Knopf, 1962.
- _____. The Purpose of American Politics. New York: Alfred A. Knopf, 1960.
- Murray, Joseph P. From Yalta to Disarmament. New York: Monthly Review Press, 1961.
- Myers, Denys P. World Disarmament: Its Problems and Prospects. Boston: World Peace Foundation, 1932.
- Neal, Fred W. U. S. Foreign Policy and the Soviet Union. Santa Barbara, Calif.: Center for the Study of Democratic Institutions, 1961.
- Noel-Baker, Philip. The Arms Race: A Programme for World Disarmament. New York: Oceana Publications, 1958.
- Nogee, Joseph L. Soviet Policy toward International Control of Atomic Energy. Notre Dame, Ind.: University of Notre Dame Press, 1961.
- Nutting, Anthony. Disarmament: An Outline of the Negotiations. New York: Oxford University Press, 1959.

Osborn, Frederick. "The USSR and the Atom," Negotiating with the Russians. Edited by Raymond Dennett and Joseph E. Johnson. Boston: World Peace Foundation, 1951, pp. 209-236.

Pauling, Linus. No More War. New York: Do&D, Mead, and Company, 1958.

Phelps, John B. "Information and Arms Control," Summer Study on Arms Control, 1960: Collected Papers. Boston: American Academy of Arts and Sciences [1961], pp. 253-260.

_____. "Some Problems of Missile Production Inspection," Arms Reduction: Program and Issues. Edited by David H. Frisch. New York: Twentieth Century Fund, 1961, pp. 104-122.

Pool, Ithiel De Sola. "Public Opinion and the Control of Armaments," Arms Control, Disarmament, and National Security. Edited by Donald G. Brennan. New York: George Braziller, 1961, pp. 333-346.

Richardson, Lewis F. Arms and Insecurity: A Mathematical Study of the Causes and Origins of War. Edited by Nicholas Rashevsky and Ernesto Trucco. Pittsburgh: Boxwood Press, 1960.

Russell, Bertrand. Has Man a Future? New York: Simon and Schuster, 1962.

Schelling, Thomas C. The Strategy of Conflict. Cambridge: Harvard University Press, 1960.

_____ and Halperin, Morton H. Strategy and Arms Control. New York: Twentieth Century Fund, 1961.

Slessor, John. Strategy for the West. New York: William Morrow and Company, 1954.

Smith, Constance B. Air Spy: The Story of Photo Intelligence in World War II. New York: Harper and Brothers, 1957.

Spanier, John W. and Nogee, Joseph L. The Politics of Disarmament: A Study of Soviet-American Gamesmanship. New York: Frederick A. Praeger, 1962.

Stoessinger, John G. "Atoms for Peace: The International Atomic Energy Agency," Organizing Peace in the Nuclear Age. Edited by Arthur M. Holcombe. New York: New York University Press, 1959, pp. 117-233.

Tate, Merze. The Disarmament Illusion: The Movement for a Limitation of Armaments to 1907. New York: The Macmillan Company, 1942.

- _____. The United States and Armaments. Cambridge: Harvard University Press, 1948.
- Teller, Edward, and Brown, Allen. The Legacy of Hiroshima. Garden City, N. Y.: Doubleday and Company, 1962.
- Toynbee, Arnold J. Survey of International Affairs, 1932. London: Oxford University Press, 1933.
- Verification and Response in Disarmament Agreements. Summary report and 2 annex vols. Washington: Institute for Defense Analyses, 1962.
- Wadsworth, James J. The Price of Peace. New York: Frederick A. Praeger, 1962.
- Warburg, James. Disarmament: The Challenge of the Nineteen Sixties. Garden City, N. Y.: Doubleday and Company, 1961.
- Wiesner, Jerome B. "Inspection for Disarmament," Arms Control: Issues for the Public. Edited by Louis Henkin. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1961, pp. 112-140.
- Willetts, Harry T. "Disarmament and Soviet Foreign Policy," Arms Control: Issues for the Public. Edited by Louis Henkin. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1961, pp. 158-173.
- Wolfe, Thomas W. "Soviet Strategy of Disarmament," American Strategy for the Nuclear Age. Edited by Walter F. Hahn and John C. Neff. Garden City, N. Y.: Doubleday and Company, 1960, pp. 139-151.
- Wright, Quincy. A Study of War. 2 vols. Chicago: University of Chicago Press, 1942.

IV. Periodical Articles and Newspapers

- Alsop, Joseph. "U. S. Flounders in Bog of Disarmament Indecision," Tampa Tribune, February 20, 1960.
- "The Backdown," Time, LXXX (November 2, 1962), 15-29.
- Bloomfield, Lincoln P. "Arms Control and World Government," World Politics, XIV (July, 1962), 633-645.
- Bulletin of the Atomic Scientists, 1946-1960.
- Cohen, Benjamin V. "Disarmament and Political Settlement," New Leader, IV (July 1, 1957), 16-18.

Cory, Robert H., Jr. "International Inspection: From Proposals to Realization," International Organization, XIII (Fall, 1959), 495-504.

Dougherty, James E. "The Disarmament Debate: A Review of Current Literature," Orbis, V (Winter, 1962), 489-511.

Dulles, Allen W. "Disarmament in the Atomic Age," Foreign Affairs, XXV (January, 1947), 204-216.

Facts on File, 1946-1962.

Finkelstein, Lawrence S. "Arms Inspection," International Conciliation, DXL (November, 1962), 1-89.

Gehron, William J. "Geneva Conference on the Discontinuance of Nuclear Weapon Tests: History of Political and Technical Developments of the Negotiations from October 31, 1958, to August 22, 1960," in U. S., Department of State Bulletin, XLIII (September 26, 1960), 482-497.

Halle, Louis J. "Is War Obsolete?" New Republic, CXLVI (April 2, 1962), 13-17.

Iklé, Fred C. "After Detection--What?" Foreign Affairs, XXXIX (January, 1961), 208-220.

Jacob, Philip E. "The Disarmament Consensus," International Organization, XIV (Spring, 1960), 233-260.

Kissinger, Henry A. "Arms Control, Inspection, and Surprise Attack," Foreign Affairs, XXXVIII (July, 1960), 557-575.

_____. "Controls, Inspection, and Limited War," The Reporter, XVI (June 13, 1957), 14-19.

_____. "Force and Diplomacy in the Nuclear Age," Foreign Affairs, XXXIV (April, 1956), 349-366.

Marshall, Charles B. "Hide and Seek: Some Dour Thoughts on Inspection," New Republic, CXLVII (November 24, 1962), 14-17.

Martin, Laurence W. "Disarmament: An Agency in Search of a Policy," The Reporter, XXIX (July 4, 1963), 22-26.

Morgenthau, Hans J. "Another 'Great Debate': The National Interest of the United States," American Political Science Review, XLVI (December, 1952), 961-988.

Murphy, Charles J. V. "Now the President Will Decide on His Own," Life, LII (February 16, 1962), 71-83.

New York Times, 1945-1962.

Nogee, Joseph. "The Diplomacy of Disarmament," International Conciliation, DXXVI (January, 1960), 235-303.

Oppenheimer, J. Robert. "International Control of Atomic Energy," Foreign Affairs, XXVI (January, 1948), 239-252.

Orear, Jay. "A New Approach to Inspection," Bulletin of the Atomic Scientists, XVII (March, 1961), 107-110.

Osgood, Robert E. "Stabilizing the Military Environment," American Political Science Review, LV (March, 1961), 24-39.

Packman, Martin. "Inspection for Disarmament," Editorial Research Reports, June 11, 1957, pp. 423-440.

Reves, Emery. "Why Waste Time Discussing Disarmament?" Look, XXV (March 28, 1961), 67-70.

Russett, Bruce M. "Cause, Surprise, and No Escape," Journal of Politics, XXIV (February, 1962), 3-22.

Salvin, Marina. "Soviet Policy toward Disarmament," International Conciliation, CDXXVIII (February, 1947), 42-116.

Schelling, Thomas C. "Arms Control: Proposal for a Special Surveillance Force," World Politics, XIII (October, 1960), 1-18.

Schuman, Frederick L. "The Impasse of Disarmament," Current History, XLI (November, 1961), 267-272, 298.

Strother, Robert. "Space Cameras on Peace Patrol," Reader's Digest, LXXX (January, 1962), 107-111.

Symington, Stuart. "Where the Missile Gap Went," The Reporter, XXVI (February 15, 1962), 21-23.

Teller, Edward. "Plan for Survival," Saturday Evening Post, CCXXXV (February 17, 1962), 32-37.

Truman, Harry S. "Recommendation on Greece and Turkey: Message of the President to the Congress," in U. S., Department of State Bulletin, XVI (March 23, 1947), 534-537.

Wilds, Thomas. "How Japan Fortified the Mandated Islands," United States Naval Institute Proceedings, LXXXI (April, 1955), 401-407.

Wohlsletter, Albert. "The Delicate Balance of Terror," Foreign Affairs, XXXVII (January, 1959), 211-234.

BIOGRAPHICAL SKETCH

Terrell Wayne Bailey was born January 4, 1935, at Milton, Florida. After graduating from the Chumuckla High School in June, 1950, he entered the University of Florida where he received the degree Bachelor of Arts with a major in political science in June, 1954. Mr. Bailey was awarded a Carnegie Fellowship for graduate study at Peabody College, Nashville, Tennessee, during the 1954-1955 academic year. In August, 1955, he received the degree Master of Arts. From 1955 to 1959 he was an instructor of political science and history at the Chipola Junior College, Marianna, Florida.

In June, 1959, Mr. Bailey enrolled in the Graduate School of the University of Florida to study toward the degree Doctor of Philosophy with a major in political science. He worked as a teaching assistant in the Social Science Department until June, 1960, and as a graduate assistant in the Department of Political Science until June, 1961, when he was awarded a graduate fellowship. During the 1962-1963 academic year he held the position of Instructor of Social Sciences at the University of Florida. Beginning in September, 1963, he will be Assistant Professor of Political Science at Stetson University.

Terrell Wayne Bailey is married to the former Mary Frances McKinney. He is a member of the American Association of University Professors, the American Political Science Association, the Southern Political Science Association, Pi Sigma Alpha, Phi Alpha Theta, and Phi Kappa Phi.

August 10, 1963

Stan E. Winderly
Dean, College of Arts and Sciences

Dean, Graduate School

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